

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
TYLER DIVISION**

ERICSSON INC., and TELEFONAKTIEBOLAGET LM ERICSSON, Plaintiffs/Counterclaim Defendants, v. SAMSUNG ELECTRONICS CO., LTD., <i>et al.</i> , Defendants/Counterclaim Plaintiffs.	CIVIL ACTION NO. 6:12-cv-894 JURY TRIAL DEMANDED
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**SAMSUNG’S THIRD AMENDED ANSWER, AFFIRMATIVE DEFENSES AND
COUNTERCLAIMS TO ERICSSON’S FIRST AMENDED COMPLAINT
FOR PATENT INFRINGEMENT**

Defendants/Counterclaim Plaintiffs Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., and Samsung Telecommunications America, LLC (individually and collectively “Samsung”), by and through their attorneys, hereby answer Plaintiff Ericsson Inc. and Telefonaktiebolaget LM Ericsson’s (collectively “Ericsson” or “Plaintiff”) First Amended Complaint For Patent Infringement (“Amended Complaint”), filed on January 29, 2013.

INTRODUCTION

Ericsson’s Amended Complaint rests on deception and misdirection in order to shade the real posture of this dispute. Ericsson is a holder of patents that are purportedly “essential” to certain technical standards, and it has previously committed to license those patents under fair, reasonable and non-discriminatory (“FRAND”) terms. But Ericsson has recently jettisoned its mobile phone business, and it now feels unhinged as a non-practicing entity in the mobile phone

market to extort vastly unreasonable and discriminatory license fees from Samsung under threat of product exclusion resulting from a simultaneously filed complaint in the U.S. International Trade Commission (“ITC”). Ericsson’s misguided actions epitomize the patent “hold up” problem that has been the recent subject of wide discussion within standard-setting organizations and other authorities around the globe, and its actions should not be condoned nor fostered in this Court.

Ericsson and Samsung are not strangers. The companies have a long licensing history that includes two prior license agreements, most recently an agreement executed in 2007 in which the parties granted one another rights to patents including those that were declared essential to various wireless standards (“standard essential patents” or “SEPs”). The 2007 agreement expired on March 31, 2011. Since that time, the parties have engaged in negotiations so that a new agreement could be finalized between the parties, on terms that Samsung believed would have been consistent with the prior licenses. But that was never Ericsson’s intention.

Ericsson’s obligation to license its patents under FRAND terms is anchored in Ericsson’s contracts with – and participation in – the standards setting organizations ETSI and IEEE, organizations that are instrumental in developing standards for telecommunications and other widespread technologies. Ericsson’s own statement to the U.S. Securities and Exchange Commission makes this clear:

Since these standards are developed in industry-wide collaboration to ensure multi-vendor interoperability, *patent holders waive their monopolies and commit to licensing their part of the technology to others wanting to use it. [Ericsson] complies with fair, reasonable and non-discriminatory licensing (FRAND).* This fair return licensing provides incentive to make further investments in R&D, while also allowing for new entrants to commercialize the technology *at a reasonable cost.* International standards and FRAND licensing are *fundamental*

for the telecom ecosystem and are a prerequisite for the global success of mobile communications.¹

Ericsson notes that “FRAND licensing is a two-way street.” Complaint at Para. 9. But it is Ericsson – not Samsung – that seeks to ignore over a decade of licensing history between the companies and to travel down a new road as an NPE extracting irrational sums from Samsung under threat of an ITC exclusion order barring importation of Samsung’s products into the U.S., injunctive relief that is directly contrary to Ericsson’s waiver of its monopoly aspirations. Although Samsung is a willing licensee, Ericsson demands unreasonable terms and conditions from Samsung, and its various assertions in its complaint seeking to cloak Ericsson as a guardian of FRAND are wholly contrary to its actions. Ericsson seeks to extract a usurious ransom that dwarfs the amounts paid by Samsung in two prior agreements (reached in 2001 and 2007) as well as the payments made by any other Ericsson licensee. And this is just one stop along Ericsson’s toll highway – Ericsson no doubt has plans to extract unreasonable fees from the rest of the industry unless stopped by Samsung here.

Of course, Samsung cannot stand idly by as Ericsson seeks to trample on Samsung’s business, one Samsung has earned through investment and innovation. Samsung is one of the world’s leading designers, manufacturers, and suppliers of consumer electronics products and components and has built its business through innovation and premium product offerings. Samsung is a household name and its popular consumer products including mobile phones and TVs have set the mark for design, quality, and feature-depth. Samsung’s popular GALAXY brand products, for example, provide a robust platform for entertainment, communications, and applications to enhance every-day life of consumers. Samsung’s success has been achieved

¹ Form 20-f of LM Ericsson Telephone Company, United States Securities and Exchange Commission, dated April 4, 2012 (emphasis added).

through decades of investments in R&D, with \$8.6 billion invested in 2011 alone, and Samsung's innovations have been recognized by the award of over 44,000 U.S. patents.

Indeed, Samsung's significant technology investments have resulted in Samsung's leadership position in key mobile technology areas including patented innovations in 4G LTE. While Ericsson has exited the mobile device business, it still sells equipment to network operators and it requires a license from Samsung in order to lawfully do so. Samsung has asserted counterclaims herein in order to remedy Ericsson's ongoing, unlicensed infringement of Samsung's patents.

Ericsson chose an unfortunate course to resolve this dispute. By not first offering a license on FRAND terms, Ericsson breached its commitments to the standard setting organizations and the public that relies on these standards. Instead, Ericsson seeks to dismantle the standard-setting framework with unreasonable and discriminatory license demands from a willing licensee under threat of product exclusion. Samsung denies the allegations in Ericsson's complaint as set forth below and states the following defenses and counterclaims.

GENERAL DENIAL

Samsung denies the allegations in Ericsson's Amended Complaint unless expressly admitted in the following paragraphs.

BACKGROUND

1. Samsung admits that Ericsson filed this suit against Samsung in this Court. Samsung denies the remaining allegations of paragraph 1 of the Amended Complaint.

2. Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations contained in paragraph 2 of the Amended Complaint, and therefore denies those allegations.

3. Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations contained in paragraph 3 of the Amended Complaint, and therefore denies those allegations.

4. Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations contained in paragraph 4 of the Amended Complaint, and therefore denies those allegations.

5. Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations contained in paragraph 5 of the Amended Complaint, and therefore denies those allegations.

6. Samsung admits that Ericsson and Samsung previously entered into two cross-licensing agreements in 2001 and 2007, respectively, that have expired. Samsung denies the remaining allegations of paragraph 6 of the Amended Complaint.

7. Samsung denies the allegations of paragraph 7 of the Amended Complaint.

8. Samsung denies the allegations of paragraph 8 of the Amended Complaint.

9. Samsung denies the allegations of paragraph 9 of the Amended Complaint that are directed at Samsung. The remaining allegations of paragraph 9 of the Amended Complaint are too generalized, vague, and ambiguous to admit or deny, and therefore Samsung denies those allegations.

10. Samsung denies the allegations of paragraph 10 of the Amended Complaint.

THE PARTIES

11. Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations contained in paragraph 11 of the Amended Complaint, and therefore denies those allegations.

12. Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations contained in paragraph 12 of the Amended Complaint, and therefore denies those allegations.

13. Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations contained in paragraph 13 of the Amended Complaint, and therefore denies those allegations.

14. Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations contained in paragraph 14 of the Amended Complaint, and therefore denies those allegations.

15. Samsung admits that Samsung Electronics is a corporation organized under the laws of the Republic of Korea. Samsung further admits that Samsung Electronics' business includes developing and manufacturing telephones, base stations, televisions, computers, Blu-ray players, cameras, and other devices that are imported into the United States and are marketed, sold, and/or offered for sale in the United States after importation, including within this District, but not necessarily directed purposefully or solely at this District. Samsung denies that Samsung Electronics imports telephones, base stations, televisions, computers, Blu-ray players, cameras, and other devices into the United States. Samsung denies the remaining allegations of paragraph 15 of the Amended Complaint.

16. Samsung admits that Samsung Electronics America has a principal place of business at 85 Challenger Road, Ridgefield Park, New Jersey 07660. Samsung further admits that Samsung Electronics America's business includes importing, marketing, selling, and/or offering for sale telephones, base stations, televisions, computers, Blu-ray players, cameras, and other devices in the United States, including within this District, but not necessarily directed

purposefully or solely at this District. Samsung denies that Samsung Electronics America manufactures base stations, televisions, computers, Blu-ray players, cameras, and other devices. Samsung further admits that Samsung Electronics America has a registered agent in Texas, and that this agent is CT Corporation System, located at 350 N. St. Paul St., Suite 2900, Dallas, Texas 75201-4234. Samsung denies the remaining allegations of paragraph 16 of the Amended Complaint.

17. Samsung admits that Samsung Telecommunications is a limited liability company organized under the laws of the State of Delaware, with its principal place of business at 1301 East Lookout Drive, Richardson, Texas 75082. Samsung further admits that Samsung Telecommunications' business includes importing, marketing, selling, and/or offering for sale telephones, base stations, televisions, and other devices in the United States, including within this District, but not necessarily directed purposefully or solely at this District. Samsung denies that Samsung Telecommunications manufactures telephones, base stations, televisions, computers, Blu-ray players, cameras, and other devices. Samsung further admits that Samsung Telecommunications has a registered agent in Texas, and that this agent is Corporation Service Company dba CSC – Lawyers Incorporating Service Company, located at 211 E. 7th Street, Suite 620, Austin, Texas 78701-3218. Samsung denies the remaining allegations of paragraph 17 of the Amended Complaint.

JURISDICTION AND VENUE

18. Samsung admits that Ericsson's allegations of patent infringement purport to arise under Title 35 of the United States Code, but denies that such allegations are meritorious. Samsung admits that, for the purposes of this action only, this Court has subject matter jurisdiction over this suit pursuant to 28 U.S.C. §§ 1331, 1338, 2201, and 2202.

19. Samsung admits that venue is permissible, for purposes of this action only, under 28 U.S.C. §§ 1391 and 1400, but denies that venue is proper or convenient.

20. For purposes of this action only, Samsung does not contest personal jurisdiction. Samsung denies the remaining allegations of paragraph 20 of the Amended Complaint.

THE PATENTS

21. Samsung admits that United States Patent No. 6,029,052 ("the '052 patent"), entitled "Multiple Mode Direct Conversion Receiver," issued on February 22, 2000. Samsung further admits that, on its face, the '052 patent lists Martin Isberg, Bjorn Lindquist, Peter Jakobsson, Jan Celander, Kjell Gustafsson, Lars-Peter Kunkel, Torsten Carlsson, and Jacob Mannerstrale as inventors. Samsung denies that the '052 patent was "duly and legally" issued. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations contained in paragraph 21 of the Amended Complaint, and therefore denies those allegations.

22. Samsung admits that United States Patent No. 6,058,359 ("the '359 patent"), entitled "Speech Coding Including Soft Adaptability Feature," issued on May 2, 2000. Samsung further admits that, on its face, the '359 patent lists Roar Hagen and Erik Ekuddenas as inventors. Samsung denies that the '359 patent was "duly and legally" issued. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining

allegations contained in paragraph 22 of the Amended Complaint, and therefore denies those allegations.

23. Samsung admits that United States Patent No. RE 43,931 (“the ’931 patent”), entitled “Radiotelephones Having Contact-Sensitive User Interfaces and Methods of Operating Same” is a Reissue of United States Patent No. 6,278,888 (“the ’888 patent”). Samsung further admits that the ’931 patent, on its face, lists John Joseph Hayes, Jr. and Curtis Wayne Thornton as inventors and that it issued on January 15, 2013. Samsung denies that the ’931 patent was “duly and legally” issued. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations contained in paragraph 23 of the Amended Complaint, and therefore denies those allegations.

24. Samsung admits that United States Patent No. 6,301,556 (“the ’556 patent”), entitled “Reducing Sparseness in Coded Speech Signals,” issued on October 9, 2001. Samsung further admits that, on its face, the ’556 patent lists Roar Hagen, Bjorn Stig Erik Johansson, Erik Ekudden, and Willem Baastian Kleijn as inventors. Samsung denies that the ’556 patent was “duly and legally” issued. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations contained in paragraph 24 of the Amended Complaint, and therefore denies those allegations.

25. Samsung admits that United States Patent No. 6,418,310 (“the ’310 patent”), entitled “Wireless Subscriber Terminal Using Java Control Code,” issued on July 9, 2002. Samsung further admits that, on its face, the ’310 patent lists Paul W. Dent as an inventor. Samsung denies that the ’310 patent was “duly and legally” issued. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations contained in paragraph 25 of the Amended Complaint, and therefore denies those allegations.

26. Samsung admits that United States Patent No. 6,445,917 (“the ’917 patent”), entitled “Mobile Station Measurements With Event-Based Reporting,” issued on September 3, 2002. Samsung denies that the ’917 patent, on its face, lists only Gunnar Bark and Joakim Bergstrom as inventors. Samsung further denies that the ’917 patent was “duly and legally” issued. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations contained in paragraph 26 of the Amended Complaint, and therefore denies those allegations.

27. Samsung admits that United States Patent No. 6,473,506 (“the ’506 patent”), entitled “Signaling Using Phase Rotation Techniques in a Digital Communications System,” issued on October 29, 2002. Samsung further admits that, on its face, the ’506 patent lists Mikael Hook and Stefan Javerbring as inventors. Samsung denies that the ’506 patent was “duly and legally” issued. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations contained in paragraph 27 of the Amended Complaint, and therefore denies those allegations.

28. Samsung admits that United States Patent No. 6,519,223 (“the ’223 patent”), entitled “System and Method for Implementing a Semi Reliable Retransmission Protocol,” issued on February 11, 2003. Samsung further admits that, on its face, the ’223 patent lists Stefan Henrik, Andreas Wager, and Reiner Ludwig as inventors. Samsung denies that the ’223 patent was “duly and legally” issued. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations contained in paragraph 28 of the Amended Complaint, and therefore denies those allegations.

29. Samsung admits that United States Patent No. 6,624,832 (“the ’832 patent”), entitled “Methods, Apparatus and Computer Program Products for Providing User Input to an

Application Using a Contact-Sensitive Surface,” issued on September 23, 2003. Samsung further admits that, on its face, the ’832 patent lists Eric Anthony Thomas as an inventor. Samsung denies that the ’832 patent was “duly and legally” issued. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations contained in paragraph 29 of the Amended Complaint, and therefore denies those allegations.

30. Samsung admits that United States Patent No. 6,772,215 (“the ’215 patent”), entitled “Method for Minimizing Feedback Responses in ARQ Protocols,” issued on August 3, 2004. Samsung further admits that, on its face, the ’215 patent lists Bela Rathonyi, Joachim Sachs, Michael Meyer, Per Beming, Mathias Johansson, Christiaan Roobol, Erik Schon, and Kazuhiko Inoue as inventors. Samsung denies that the ’215 patent was “duly and legally” issued. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations contained in paragraph 30 of the Amended Complaint, and therefore denies those allegations.

31. Samsung admits that United States Patent No. 8,169,992 (“the ’992 patent”), entitled “Uplink Scrambling During Random Access,” issued on May 1, 2012. Samsung further admits that, on its face, the ’992 patent lists Stefan Parkvall, Erik Dahlman, and Tobias Tynderfeldt as inventors. Samsung denies that the ’992 patent was “duly and legally” issued. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations contained in paragraph 31 of the Amended Complaint, and therefore denies those allegations.

ALLEGED FACTUAL BACKGROUND

32. The allegations of paragraph 32 are too generalized, vague, and ambiguous to admit or deny. To the extent a response is necessary, Samsung denies the allegations and characterizations of paragraph 32 of the Amended Complaint.

33. Samsung denies the allegations of paragraph 33 of the Amended Complaint.

34. Samsung denies the allegations of paragraph 34 of the Amended Complaint.

COUNT I
CLAIM FOR ALLEGED PATENT INFRINGEMENT OF THE '052 PATENT

35. Samsung repeats and incorporates by reference the responses in paragraphs 1-34 as though fully set forth herein.

36. Samsung denies the allegations of paragraph 36 of the Amended Complaint.

37. Samsung denies the allegations of paragraph 37 of the Amended Complaint.

COUNT II
CLAIM FOR ALLEGED PATENT INFRINGEMENT OF THE '359 PATENT

38. Samsung repeats and incorporates by reference the responses in paragraphs 1-37 as though fully set forth herein.

39. Samsung denies the allegations of paragraph 39 of the Amended Complaint.

40. Samsung denies the allegations of paragraph 40 of the Amended Complaint.

COUNT III
CLAIM FOR ALLEGED PATENT INFRINGEMENT OF THE '931 PATENT

41. Samsung repeats and incorporates by reference the responses in paragraphs 1-40 as though fully set forth herein.

42. Samsung denies the allegations of paragraph 42 of the Amended Complaint.

43. Samsung denies the allegations of paragraph 43 of the Amended Complaint.

COUNT IV
CLAIM FOR ALLEGED PATENT INFRINGEMENT OF THE '556 PATENT

44. Samsung repeats and incorporates by reference the responses in paragraphs 1-43 as though fully set forth herein.

45. Samsung denies the allegations of paragraph 45 of the Amended Complaint.

46. Samsung denies the allegations of paragraph 46 of the Amended Complaint.

COUNT V
CLAIM FOR ALLEGED PATENT INFRINGEMENT OF THE '310 PATENT

47. Samsung repeats and incorporates by reference the responses in paragraphs 1-46 as though fully set forth herein.

48. Samsung denies the allegations of paragraph 48 of the Amended Complaint.

49. Samsung denies the allegations of paragraph 49 of the Amended Complaint.

COUNT VI
CLAIM FOR ALLEGED PATENT INFRINGEMENT OF THE '917 PATENT

50. Samsung repeats and incorporates by reference the responses in paragraphs 1-49 as though fully set forth herein.

51. Samsung denies the allegations of paragraph 51 of the Amended Complaint.

52. Samsung denies the allegations of paragraph 52 of the Amended Complaint.

COUNT VII
CLAIM FOR ALLEGED PATENT INFRINGEMENT OF THE '506 PATENT

53. Samsung repeats and incorporates by reference the responses in paragraphs 1-52 as though fully set forth herein.

54. Samsung denies the allegations of paragraph 54 of the Amended Complaint.

55. Samsung denies the allegations of paragraph 55 of the Amended Complaint.

COUNT VIII
CLAIM FOR ALLEGED PATENT INFRINGEMENT OF THE '223 PATENT

56. Samsung repeats and incorporates by reference the responses in paragraphs 1-55 as though fully set forth herein.

57. Samsung denies the allegations of paragraph 57 of the Amended Complaint.

58. Samsung denies the allegations of paragraph 58 of the Amended Complaint.

COUNT IX
CLAIM FOR ALLEGED PATENT INFRINGEMENT OF THE '832 PATENT

59. Samsung repeats and incorporates by reference the responses in paragraphs 1-58 as though fully set forth herein.

60. Samsung denies the allegations of paragraph 60 of the Amended Complaint.

61. Samsung denies the allegations of paragraph 61 of the Amended Complaint.

COUNT X
CLAIM FOR ALLEGED PATENT INFRINGEMENT OF THE '215 PATENT

62. Samsung repeats and incorporates by reference the responses in paragraphs 1-61 as though fully set forth herein.

63. Samsung denies the allegations of paragraph 63 of the Amended Complaint.

64. Samsung denies the allegations of paragraph 64 of the Amended Complaint.

COUNT XI
CLAIM FOR ALLEGED PATENT INFRINGEMENT OF THE '992 PATENT

65. Samsung repeats and incorporates by reference the responses in paragraphs 1-64 as though fully set forth herein.

66. Samsung denies the allegations of paragraph 66 of the Amended Complaint.

67. Samsung denies the allegations of paragraph 67 of the Amended Complaint.

RESPONSE TO PLAINTIFF’S DEMAND FOR JURY TRIAL

Samsung hereby demands trial by jury for all issues so triable.

RESPONSE TO PLAINTIFF’S PRAYER FOR RELIEF

Samsung denies that Plaintiff is entitled to any relief whatsoever from Samsung as prayed for in the Amended Complaint, denies that Plaintiff is entitled to an injunction, and denies that Plaintiff is entitled to any other relief.

SAMSUNG’S AFFIRMATIVE DEFENSES

In addition to the defenses described below, Samsung specifically reserves the right to assert additional defenses as they become known through the course of discovery.²

**FIRST AFFIRMATIVE DEFENSE
(Invalidity)**

68. The asserted claims of the ’052, ’359, ’931, ’556, ’310, ’917, ’506, ’223, ’832, ’215, and ’992 patents (“Asserted Patents”) are invalid because they fail to satisfy one or more of the conditions for patentability specified in Title 35 of the United States Code, including, without limitation, 35 U.S.C. §§ 101, 102, 103, and/or 112.

**SECOND AFFIRMATIVE DEFENSE
(Non-Infringement)**

69. Samsung does not infringe and has not infringed under any theory (including directly, jointly, contributorily, or by inducement) any valid and enforceable claim of the Asserted Patents, either literally or under the doctrine of equivalents.

² To avoid any ambiguity, Samsung further maintains the affirmative defenses set forth in Defendant Samsung’s Response to Ericsson’s Answer, Affirmative Defenses, and Counterclaims to Samsung’s First Amended Answer, Affirmative Defenses and Counterclaims (Dkt. No. 36).

THIRD AFFIRMATIVE DEFENSE
(Statutory Damages Limitations)

70. Plaintiff's recovery for alleged infringement of the Asserted Patents, if any, is limited by Title 35 of the United States Code, including, without limitation, 35 U.S.C. §§ 286 and 287.

FOURTH AFFIRMATIVE DEFENSE
(Government Sales)

71. Plaintiff's remedies, if any, are limited under 28 U.S.C. § 1498(a).

FIFTH AFFIRMATIVE DEFENSE
(Prosecution History Estoppel)

72. Plaintiff is estopped, based on statements, representations, and admissions made during the prosecution of the patent applications resulting in the Asserted Patents, as well as reissue and/or reexamination proceedings related to any of the Asserted Patents, from asserting that Samsung has infringed, directly or indirectly, any claim of the Asserted Patents, either literally or under the doctrine of equivalents.

SIXTH AFFIRMATIVE DEFENSE
(Covenant Not to Sue, License, and/or Patent Exhaustion)

73. Plaintiff's claims are barred in whole or in part pursuant to a covenant not to sue, an express and/or implied license, and/or the doctrine of patent exhaustion.

74. On information and belief, and by way of example without limitation, Samsung has rights arising from its use of Qualcomm Incorporated ("Qualcomm") components in certain Samsung products. On information and belief, Qualcomm entered into a license agreement with Plaintiff by which Qualcomm received, among other things, certain rights related to the Asserted Patents. Samsung has an express or implied license to manufacture, use, import, and sell electronic devices incorporating licensed Qualcomm components under the Asserted Patents.

Moreover, under the doctrine of patent exhaustion, the purchase by Samsung of the licensed components from Qualcomm exhausts Plaintiff's alleged rights under the Asserted Patents.

75. On information and belief, and by way of example without limitation, Samsung has rights arising from its use of ST-Ericsson components in certain Samsung products. On information and belief, ST-Ericsson has obtained rights to one or more of the Asserted Patents from Plaintiff. Samsung has an express or implied license to manufacture, use, import, and sell electronic devices incorporating licensed ST-Ericsson components under the Asserted Patents. Moreover, under the doctrine of patent exhaustion, the purchase by Samsung of the licensed components from ST-Ericsson exhausts Plaintiff's alleged rights under the Asserted Patents.

**SEVENTH AFFIRMATIVE DEFENSE
(Unenforceability)**

76. Plaintiff's claims as they relate to at least the '917, '506, '223, '215, '992, '359, and '556 patents are barred in whole or in part by reason of estoppel, unclean hands, waiver, and/or other equitable doctrines based on Plaintiff's failure to comply with its contractual obligations made to the European Telecommunications Standards Institute ("ETSI"), 3rd Generation Partnership Project ("3GPP"), and Institute of Electrical and Electronics Engineers ("IEEE"), as well as to third party beneficiaries of those obligations (including the members of those organizations and manufacturers of products compliant with ETSI, 3GPP, and IEEE standards).

77. ETSI is a standards-setting organization ("SSO") that is responsible for the standardization of information and communication technologies for the benefit of its members and third parties. 3GPP is a collaborative activity through a group of recognized SSOs (its "Organizational Partners"), including ETSI. 3GPP develops technical specifications subsequently presented to and adopted as standards by its Organizational Partners, such as ETSI.

78. IEEE, through IEEE-SA, is an SSO that is responsible for standardization for the benefit of its members and third parties. IEEE develops and adopts technical specifications, including the 802.11 series of standards.

79. Like other SSOs, ETSI, IEEE, and 3GPP have developed Intellectual Property Rights (“IPR”) Policies designed to ensure that investment in standard-setting and standard-compliant equipment is not wasted as a result of essential IPR being unavailable or only available under unreasonable and/or discriminatory licensing terms. In addition, as a 3GPP “Individual Member,” Ericsson was “bound by the IPR Policy” of ETSI, the Organizational Partner through which Ericsson participated in 3GPP. These policies generally require that SSO members disclose their ownership of patents that may be essential to practice the standard and commit to licensing these patents on fair, reasonable and non-discriminatory (“FRAND”) terms. SSO IPR Policies are designed to obtain FRAND licensing obligations from patent owners to ensure that they will not use their IPR to extract unreasonable license fees or to exclude any market participant that is willing to accept a license for use of the IPR on FRAND terms and conditions.

80. ETSI’s IPR Policy is set forth in Annex 6 of its Rules of Procedure. Clause 4.1 of the ETSI IPR Policy requires ETSI members to declare all essential IPR in a timely manner. Clause 15 of ETSI’s IPR Policy defines IPR to mean “any intellectual property right conferred by statute law including applications therefor other than trademarks.” Therefore, market participants have a reasonable expectation that all potentially essential patents or patent applications will be disclosed to ETSI. Clause 6 of ETSI’s IPR Policy governs the availability of licenses to essential IPR, stating that when essential IPRs are brought to the attention of ETSI, ETSI shall immediately request an undertaking in writing that the IPR owner is prepared to grant

irrevocable licenses on fair, reasonable, and non-discriminatory terms. Clause 8 of ETSI's IPR Policy states that, if an IPR owner refuses to give a FRAND commitment in accordance with Clause 6.1 of the IPR Policy prior to the publication of a standard, ETSI will select an alternative technology to incorporate into the standard, or will stop work entirely on the standard if no alternative is available. Further, if an IPR owner refuses to give a FRAND commitment in accordance with Clause 6.1 after publication of a standard, ETSI shall try to modify the standard so that the IPR in question is no longer essential or failing that will involve the European Commission to see what further action is required.

81. The IEEE's IPR Policy is set forth in Section 6.2 of the IEEE-SA Standards Board Bylaws. This section requires that the IEEE "request licensing assurance" through a Letter of Assurance process. This Letter of Assurance must contain either (1) "[a] general disclaimer to the effect that the Submitter without conditions will not enforce any present or future Essential Patent Claims against any person ... implementing ... the standard," or (2) "[a] statement that a license for a compliant implementation of the standard will be made available to an unrestricted number of applicants on a worldwide basis without compensation or under reasonable rates, with reasonable terms and conditions that are demonstrably free of any unfair discrimination."

82. The IEEE's IPR Policy further states that "In order for IEEE's patent policy to function efficiently, individuals participating in the standards development process: (a) shall inform the IEEE (or cause the IEEE to be informed) of the holder of any potential Essential Patent Claims of which they are personally aware and that are not already the subject of an existing Letter of Assurance, owned or controlled by the participant or the entity the participant is from, employed by, or otherwise represents; and (b) should inform the IEEE (or cause the

IEEE to be informed) of any other holders of such potential Essential Patent Claims that are not already the subject of an existing Letter of Assurance.”

83. Relying on the IPR Policies of these SSOs and on the accompanying patent owner obligations under these Policies, the SSOs and other third parties, including Samsung, adopted various technologies into the technical standards that were being developed.

84. Ericsson is a member of the respective SSOs and an alleged contributor to these various standards. As such, Ericsson has declared that the related patents must be licensed on FRAND terms. For example, Ericsson has declared to ETSI that at least each of the '917, '506, '223, '215, '992, '359, and '556 patents is essential or potentially essential to one or more standard, and explicitly has undertaken “to grant irrevocable licenses under the IPRs on terms and conditions which are in accordance with Clause 6.1 of the ETSI IPR Policy,” *i.e.*, on FRAND terms. Also, in a Letter of Assurance directed to IEEE 802.11n, Ericsson also agreed to “grant a license under reasonable rates to an unrestricted number of applicants on a worldwide basis with reasonable terms and conditions that are demonstrably free of unfair discrimination.”

85. As a member and participant in these SSOs, Samsung relied on the IPR Policies of ETSI, 3GPP and IEEE to ensure that it will have the ability to obtain licenses to standard essential patents on FRAND terms before developing and investing in products and technologies that may practice the standard. For example, Samsung has made substantial investments in the design, manufacture, launch and continued innovation of these products and technologies.

86. Moreover, Samsung and Ericsson have previously entered into license agreements relating to technology at issue in this case. In December 2001, after extensive arm's-length negotiations, Samsung and Ericsson entered into a worldwide cross-license agreement that

specified payment from Samsung to Ericsson for a four year cross license plus a release for the previous four years for the use of both parties' essential patents.

87. When the 2001 License expired in 2005, Ericsson demanded an exorbitant renewal fee for the following five years. Despite Samsung's attempts to reach an agreement with Ericsson, Ericsson refused to reduce its demand. Instead, Ericsson initiated litigations against Samsung in the middle of the renewal negotiations between the parties. Contrary to Ericsson's FRAND obligations, Ericsson sought to exclude Samsung's products from the United States without ever offering a license on FRAND terms as required.

88. The parties eventually resolved the pending litigations by entering into a new cross-license on June 29, 2007. The 2007 Agreement expired in 2011. Instead of proposing terms consistent with the two previous license agreements, Ericsson refused to acknowledge those agreements. Instead, consistent with Ericsson's new business model, which no longer includes the manufacture of handsets, Ericsson demanded terms that were unfair, unreasonable, and discriminatory, particularly in comparison to the parties' previous agreements. Ericsson has not complied with its obligation to offer to Samsung, and negotiate, a license on FRAND terms. In addition, upon information and belief, Ericsson failed to use reasonable endeavors to inform ETSI, IEEE, and 3GPP in a timely fashion of the existence of the purported IPR relating to one or more patents asserted herein thus constituting further breach of its obligations to the respective SSO and its members.

89. Ericsson once again initiated litigations against Samsung in the middle of the renewal negotiations between the parties. Ericsson again seeks to exclude Samsung's products from the United States, contrary to its earlier contractual obligations and promises. Ericsson's unreasonable and discriminatory license demands and associated litigation tactics are in violation

of its FRAND obligations. Ericsson is in breach of its obligations and promises and should be barred from seeking relief here, at the ITC, or any other forum for Samsung's alleged infringement of Ericsson's declared standards-essential patents, including at least the '917, '506, '223, '215, '992, '359, and '556 patents.

**EIGHTH AFFIRMATIVE DEFENSE
(Patent Misuse)**

90. Samsung incorporates the allegations set forth in paragraphs 76-89, above. In light of these facts, Plaintiff is barred from asserting at least the '917, '506, '223, '215, '992, '359, and '556 patents by the equitable doctrine of patent misuse.

**NINTH AFFIRMATIVE DEFENSE
(Lack of Standing)**

91. Samsung incorporates the allegations set forth in paragraphs 76-89, above. In light of these facts, Ericsson lacks standing as to its claims relating to at least the '917, '506, '223, '215, '992, '359, and '556 patents. Ericsson is precluded from obtaining injunctive or other exclusionary relief because it failed to comply with its commitments to ETSI and IEEE that it would license its declared-essential patents on FRAND terms to any member of the public. Ericsson lacks standing because it has not offered Samsung a license on FRAND terms or negotiated in good faith to offer Samsung such a FRAND license in violation of Ericsson's representations and obligations to ETSI and IEEE.

**TENTH AFFIRMATIVE DEFENSE
(Failure to State a Claim)**

92. Samsung incorporates the allegations set forth in paragraphs 76-89, above. In light of these facts, Plaintiff's Amended Complaint fails to state a claim upon which relief can be granted.

SAMSUNG'S COUNTERCLAIMS

As its counterclaims against Plaintiff/Counterclaim Defendants Ericsson Inc. and Telefonaktiebolaget LM Ericsson (collectively “Ericsson”), Defendants/Counterclaimant Plaintiffs Samsung Electronics Co., Ltd., Samsung Electronics America, Inc. and Samsung Telecommunications America, LLC (individually and/or collectively “Samsung”) demand a trial by jury on its non-equitable claims and allege as follows:³

Nature of the Action and Relief Sought

1. Samsung repeats and realleges its responses to paragraphs 1–67 and 76–89 of the Amended Complaint as though fully set forth herein.

2. Over the course of two years of negotiations between the parties, Ericsson has engaged in a pervasive and pernicious pattern of refusing to grant licenses to Samsung on fair, reasonable, and nondiscriminatory (“FRAND”) terms for, among others, patents which Ericsson has declared to be essential to the Global System for Mobile Communications (“GSM”), Wideband Code Division Multiple Access (“W-CDMA”), Long Term Evolution (“LTE”) and the 802.11 (“WiFi”) standards (collectively, the “Standards”). Ericsson’s refusal to grant such licenses breaches obligations that it made to the European Telecommunications Standards Institute (“ETSI”) and to the Institute of Electrical and Electronic Engineers Standards Association’s (“IEEE”) to offer licenses on FRAND terms for these essential patents to third parties, like Samsung, and is causing harm to Samsung and consumers in the U.S. and abroad. In addition to bringing patent-related claims, Samsung brings this litigation to remedy the ongoing harm inflicted upon it as a direct result of Ericsson’s refusal to honor its contractual

³ To avoid any ambiguity, Samsung further maintains the counterclaims set forth in Defendant Samsung’s Response to Ericsson’s Answer, Affirmative Defenses, and Counterclaims to Samsung’s First Amended Answer, Affirmative Defenses and Counterclaims (Dkt. No. 36).

commitments to provide third parties, like Samsung, with essential patent licenses on FRAND terms.

3. Innovation in the telecommunications industry is built on an ever-expanding foundation of previous discoveries. This is particularly true with respect to smart phones, such as those produced by Samsung, which combine the functionality of computers, telephones, video game platforms, and countless other devices into a single handheld machine. A single smart phone may incorporate hundreds or even thousands of technological elements that may be related to thousands of patents belonging to dozens, if not hundreds, of different entities.

4. In order to promote innovation, and to prevent a single patent holder from stifling progress by coercively threatening patent litigation, patent holders typically enter into cross-licensing agreements where each party agrees to license to the other party a broad portfolio of patents, sometimes with one party making a “balancing payment” to the other party where portfolio value and/or exposure is not deemed to be equivalent. These cross-licensing agreements provide stability and certainty to developers by allowing engineers to work freely to innovate without the undue risk of not being able to commercialize the resulting products due to threat of litigation. Since 2000, Samsung and Ericsson have entered into two such cross-licensing agreements (in 2001 and 2007) and, in each case, Samsung paid Ericsson after arms-length negotiations.

5. The need for cross-licenses is even more pronounced with respect to patents that a party has declared to be “essential” to a particular technological standard—in other words, a patent that the declarant claims is necessary for a product to utilize in order to comply with a given standard (*e.g.*, a smart phone that operates on the LTE network). The risk to innovation from a party’s ability to withhold access to essential patents is so severe that it has prompted the

various standard-setting organizations, including ETSI and the IEEE, to require that the purported patent holders grant licenses to third parties who develop products utilizing the standard on FRAND terms. Indeed, ETSI has stated that it will look for alternative technologies for a given standard in cases where a patent holder is unwilling to make this FRAND commitment.

6. Ericsson and Samsung entered into cross-licensing agreements in 2001 and 2007, under which each company granted licenses to the other in exchange for payment by Samsung to Ericsson. Early in 2011, as the termination date of the 2007 agreement approached, Samsung approached Ericsson with a request to negotiate a renewal of that license agreement whereby Ericsson would grant Samsung a portfolio license for telecommunications patents, including the essential patents reading on the Standards, on FRAND terms.

7. As described below, Ericsson has declared to ETSI and the IEEE that a host of its patents are essential to the Standards and in doing so, Ericsson has issued written declarations to ETSI and written letters of assurance to IEEE committing to license the declared essential patents on FRAND terms and conditions to others in the industry, including Samsung. In reliance on these declarations and letters, Samsung has invested a substantial amount of time and money in research and development for new products, including a new generation of products based on the latest wireless telecommunications technologies.

8. Yet, despite Ericsson's declaration of patents as essential and obligation to provide FRAND licenses for them, Ericsson has refused to negotiate the terms for their use in good faith and accordingly has failed to satisfy its FRAND obligations. On numerous occasions over the last two years, including more than a dozen in-person meetings, Samsung made repeated requests of Ericsson to license its patents declared essential on FRAND terms pursuant to a

cross-licensing agreement under which the patents would be licensed either individually or together with other Ericsson patents in exchange for a license to use certain of Samsung's patents and an acceptable balancing payment. Ericsson has neither accepted Samsung's offers of FRAND terms and conditions nor offered Samsung FRAND terms and conditions.

9. Samsung is one of the world's leading electronics companies, specializing in wireless communications, digital appliances and media, semiconductors, memory and system integration. Today, Samsung's innovative and top-quality products and processes are world recognized. Many of these advances concern Samsung's innovative wireless communications business, including both wireless communications devices ranging from smart phones to tablets as well as the hardware that supports the networks to which those devices connect. Samsung's commitment to research and development has led to a patent portfolio containing thousands of standards essential patents.

10. Ericsson's failure to negotiate a cross-license on FRAND terms has resulted in Ericsson not being licensed to Samsung's vast portfolio of standards essential patents. Consequently, this is an action for infringement under the patent laws of the United States against Ericsson for infringement of United States Patent Nos. 7,221,031, 7,342,444, 8,059,681, 8,315,195, 8,331,328, and Reissue 44,105 either literally or under the doctrine of equivalents.

11. In addition, this is an action for patent infringement of United States Patent Nos. 5,742,595, 6,164,129, 6,366,570, 6,411,825, 6,801,788, 6,907,048, 6,941,338, 6,999,471, 7,379,478, 8,193,047, 8,351,380, 8,498,255, 8,520,499, and 8,520,656. Collectively, the patents in this and the preceding paragraph are "the Samsung Asserted Patents."

12. This is also an action for breach of contract and promissory estoppel.

13. Further, this is an action to declare United States Patent Nos. 6,029,052, 6,058,359, 6,278,888, 6,301,556, 6,418,310, 6,519,223, 6,624,832, 6,772,215, 6,445,917, 6,473,506, and 8,169,992 (“the Ericsson Asserted Patents”) not infringed by Samsung and/or invalid, and that Samsung has an express or implied license to practice such patents.

Parties

14. Samsung Electronics Co., Ltd. is a corporation organized and existing under the laws of the Republic of Korea, having its principal place of business at Samsung Main Building, Taepyung-ro 2-ka, Chung-ku, Seoul 100-742 Korea.

15. Samsung Electronics America, Inc. is a New York corporation, having its principal place of business at 85 Challenger Road, Ridgefield Park, New Jersey 07660.

16. Samsung Telecommunications America, LLC is a limited liability company organized and existing under the laws of the State of Delaware, having its principal place of business at 1301 East Lookout Drive, Richardson, Texas 75082.

17. Ericsson Inc. is a corporation organized and existing under the laws of the State of Delaware, having its principal place of business at 6300 Legacy Drive, Plano, Texas 75024. Ericsson Inc. is a wholly owned subsidiary of Ericsson Holding II Inc., a Delaware corporation, which in turn is a wholly owned subsidiary of Telefonaktiebolaget LM Ericsson.

18. Telefonaktiebolaget LM Ericsson is a corporation organized and existing under the laws of the Country of Sweden, having its principal place of business at Torshamsgatan 23, Kista, Stockholm, Sweden 164 83.

Jurisdiction and Venue

19. This action arises under the patent laws of the United States, 35 U.S.C. § 100 *et seq* and the Federal Declaratory Judgment Act, 28 U.S.C. § 2201 *et seq*.

20. This Court has jurisdiction over these counterclaims under 28 U.S.C. §§ 1331, 1338(a), 1367(a) and 2201(a).

21. To the extent that this action remains in this District, venue is appropriate pursuant to 28 U.S.C. § 1391(b)-(d) and 1400(b).

22. Ericsson has consented to personal jurisdiction by commencing its action for patent infringement in this judicial district, as set forth in its Complaint.

Factual Background

23. For over 70 years, Samsung has been dedicated to the advancement of society through technological development and investment in diverse businesses. Today, Samsung leads the global market in high-tech electronics, specializing in digital products and media, semiconductors, memory, and system integration.

24. Samsung also has a long history of groundbreaking innovation across its wide range of technologies. Samsung has invested billions of dollars in research and development over the years, including more than \$35 billion from 2005 through 2010. More than a quarter of all Samsung employees engage daily in Samsung's cutting-edge research and development projects. Samsung's commitment to innovation is demonstrated by its large patent portfolio of over 44,000 United States patents, including nearly 6,000 in the telecommunications field. For the sixth year in a row in 2011, Samsung was second—only behind IBM—as a recipient of the most U.S. patents.

25. Particularly important to this dispute, Samsung has been a pioneer in the wireless telecommunications industry since the industry's inception. Samsung has dedicated time and resources to developing wireless communication technology that has increased the efficiency, reliability and functionality of standards-based networks and that has made a plethora of new

features available to the owners and users of those networks. Moreover, Samsung has undertaken to provide licenses to use its patented innovations on FRAND terms.

26. Ericsson is also the owner of certain patents related to wireless communication technology, for which it has also undertaken to provide licenses to use on FRAND terms. For years, Ericsson and Samsung cross-licensed their patent portfolios on FRAND terms, but in the latest round of negotiations between the parties, Ericsson refused to do so. Instead, Ericsson demanded that Samsung agree to pay royalty fees well-beyond the FRAND rates for its patents, many of which are invalid and/or not incorporated into Samsung's products.

27. The rapid pace of technological innovation in the telecommunications industry requires companies to invest substantial sums of money in research and development on a continuous basis in order to remain competitive. As discussed above, Samsung has invested and continues to invest tremendous amounts of money in research and development costs in order to maintain its position at the forefront of technological innovation, particularly in the telecommunications sector.

28. Because of the need for continuous investment in innovation, patent holders potentially wield a vast amount of power to unilaterally hold up production or distribution of a product by simply refusing to provide licenses on FRAND terms and threatening patent litigation. This is particularly true with respect to essential patents—those patents which a party has asserted cover necessary components of products or processes reading on a particular standard.

29. Various wireless devices rely on technologies incorporated in industry standards. Those devices connect to a variety of wireless networks, including the networks of wireless carriers to provide telecommunications services. Carriers operate wireless systems that enable

users to place and receive telephone calls, send and receive e-mails, and connect to the Internet through wireless devices. The devices and networks communicate using radio signals that carry encoded information through the air and which are relayed via fixed wireless communication base stations.

30. Companies around the world manufacture wireless devices. These manufacturers typically sell their phones to the mobile wireless carriers, which in turn, sell the phones to users. Wireless devices contain, among other components, one or more computer chipsets that enable the phone to communicate with the carriers' wireless systems. Carriers, device manufacturers, and chipset manufacturers must create equipment and devices compatible with each for them to work properly within a network. Thus, because interoperability is crucial for telecommunications, the industry uses common mobile wireless technology and participates in the crucial process of standards development, ensuring an efficient and functional system.

31. In order to harmonize the efforts of these companies, regional standard setting organizations ("SSOs") were developed to create technical specifications that companies could follow to ensure their products would be compatible with other companies' products and systems. As described above, standardization is essential to the wireless telecommunications industry because the products of different manufacturers must be interoperable so that they can communicate with each other and with different wireless networks. When an SSO's standard is widely promulgated and utilized, it produces efficiency gains and benefits across the entire industry, including allowing sophisticated products to be produced and commoditized.

32. ETSI is an independent, non-profit SSO that produces globally-accepted standards for the telecommunications industry. ETSI has more than 700 members from more than 60 countries across five continents, including both Samsung and Ericsson. In addition to its own

activities, ETSI is also one of six SSOs that are organizational partners of the 3rd Generation Partnership Project (“3GPP”), which exists to unite the SSOs in the development of worldwide standards for the telecommunications industry. Together, ETSI and its members have developed common technical standards that often become mandatory as, in some cases, national or international regulatory bodies require adherence to particular ETSI standards.

33. The IEEE is also an SSO. The IEEE develops global standards for various industries, including the communications industry. The IEEE’s involvement in electrical standards dates back to the nineteenth century. Today its membership, which includes Samsung and Ericsson, spans 160 countries and each year, on average, the IEEE publishes nearly 100 new or revised standards.

34. Many SSO members, including Ericsson, frequently are granted ownership of intellectual property related to different aspects of those technologies, including technologies related to standards set by the SSOs. Thus, technical standards adopted by SSOs may implicate member or non-member intellectual property such that a license may be required from the intellectual property owner in order to implement the standard. In order to combat against the threat of essential patent holders being able to hinder innovation through the coercive use of threatened patent infringement lawsuits—like Ericsson is improperly doing here—SSOs, including ETSI and the IEEE—require their members to grant portfolio licenses for covered essential patents to third parties on FRAND terms.

35. ETSI—recognizing that intellectual property rights issues may arise in the standard setting process and hinder ETSI members from making use of ETSI’s standards—developed an Intellectual Property Rights Policy (“ETSI IPR Policy”). The ETSI IPR Policy is intended to create a balance between the need for standardization and the investments involved,

on the one hand, and the rights and interests of intellectual property owners, on the other hand. To accomplish this goal, the ETSI IPR Policy contains rules that require ETSI members to disclose intellectual property rights that are “essential” to ETSI’s standards. Clause 15.6 of the ETSI IPR Policy defines the term “ESSENTIAL” to mean that “it is not possible on technical (but not commercial) grounds, taking into account normal technical practice and the state of the art generally available at the time of standardization, to make, sell, lease, otherwise dispose of, repair, use or operate EQUIPMENT or METHODS which comply with a STANDARD without infringing that IPR.”

36. Similarly the IEEE has incorporated a patent policy into Clause 6.2 of its Standards Board Bylaws (the “IEEE Patent Policy”).

37. Once an essential intellectual property right is disclosed to ETSI, Clause 6.1 of the ETSI IPR Policy requires ETSI to request that the intellectual property owner voluntarily undertake to grant “irrevocable licenses on fair, reasonable and non-discriminatory terms and conditions under such IPR to at least the following extent:

- (a) MANUFACTURE, including the right to make or have made customized components and sub-systems to the licensee’s own design for use in MANUFACTURE;
- (b) sell, lease, or otherwise dispose of EQUIPMENT so MANUFACTURED;
- (c) repair, use, or operate EQUIPMENT; and
- (d) use METHODS.

These terms and conditions are referred to as “FRAND terms.” An intellectual property owner whose technology is selected as part of the standard and undertakes to license on FRAND terms benefits from the incorporation of its protected technology into the standard by collecting FRAND compensation from a larger market than they would otherwise have enjoyed. In other words, because competing proprietary technologies and systems are abandoned during the

standard setting process in favor of a single system and set of technologies, a holder of an essential intellectual property right is able to collect royalties from the producers of the large number of standards-compliant products worldwide.

38. Of course, the owner of an intellectual property right implicated by a standard is not obligated to assent to the undertaking, and may instead choose to keep its technology proprietary. Under those circumstances, Clause 8.1.1 directs the ETSI to seek out a viable alternative to the essential technology, which would not require the infringement of the intellectual property right. If no viable alternative technology exists, development of the standard is ceased, pursuant to Clause 8.1.2. However, if the FRAND undertaking is given and the standard is adopted incorporating such owner's intellectual property right, all rival technologies are effectively eliminated from the market and the incentive to develop additional rival technologies is effectively curtailed. As such, the effectiveness of the FRAND undertaking is essential to preventing the SEP holder from overcharging the market for the standardized technology.

39. Accordingly, an intellectual property owner that voluntarily undertakes to license its intellectual property on FRAND terms has irrevocably committed to allow the standard to be implemented using its intellectual property. It has also waived its right to demand from those practicing the standard licensing fees above FRAND terms for using its intellectual property. Thus, a manufacturer is able to implement the standard in its products and use the inventions from the declared essential intellectual property.

40. An intellectual property owner thus makes these FRAND commitments based on the understanding that it will only receive FRAND compensation for the intellectual property used.

41. Moreover, parties operating under this scheme are obligated to negotiate FRAND terms in good faith. In fact, save for cases where the manufacturer refuses to take a license altogether, an intellectual property owner that makes a FRAND undertaking has a duty to negotiate in good faith and propose FRAND terms. Typically, negotiations over FRAND terms will cover the essential intellectual property portfolio as a whole.

42. The IEEE Patent Policy states that if an IEEE standard requires the use of a potential “Essential Patent Claim, the IEEE shall request licensing assurance . . . from the patent holder or patent applicant.”

43. The letter of assurance may be either:

(a) A general disclaimer to the effect that the Submitter without conditions will not enforce any present or future Essential Patent Claims against any person or entity making, using, selling, offering to sell, importing, distributing, or implementing a compliant implementation of the standard; or

(b) A statement that a license for a compliant implementation of the standard will be made available to an unrestricted number of applicants on a worldwide basis without compensation *or under reasonable rates, with reasonable terms and conditions that are demonstrably free of any unfair discrimination*. At its sole option, the Submitter may provide with assurance any of the following: (i) a not-to-exceed license fee or rate commitment, (ii) a sample license agreement, or (iii) one or more material licensing terms.

44. The IEEE Patent Policy also provides that the assurance is irrevocable once submitted and accepted.

Counterclaims

Counterclaim No. I:

Infringement of U.S. Patent No. 7,221,031

45. Samsung repeats and realleges the allegations in paragraphs 1–44 as though fully set forth herein.

46. United States Patent No. 7,221,031 (“the ’031 Patent”), entitled “Semiconductor Device Having Sufficient Process Margin And Method Of Forming Same,” issued on May 22, 2007. Samsung is the owner of all rights, title, and interest in and to the ’031 Patent and is entitled to sue for past and future infringement.

47. On information and belief, the products containing a semiconductor device with 6T SRAM cells infringe one or more claims of the ’031 Patent. On information and belief, Ericsson directly infringes the ’031 Patent by making, using, selling, offering for sale within the United States and/or importing into the United States, products that contain a semiconductor device with 6T SRAM cells. Exemplary infringing products include the RBS 6000 series base stations.

48. Additionally, on information and belief, service providers who deploy and/or make routine use of the infringing products infringe one or more claims of the ’031 Patent. On information and belief, Ericsson is aware of the ’031 Patent at least through the filing of this Counterclaim. Further, on information and belief, Ericsson knowingly induces users of products to infringe the ’031 Patent.

49. On information and belief, Ericsson contributes to infringement of one or more claims of the ’031 Patent because Ericsson knows that infringing products containing a semiconductor device with 6T SRAM cells are specially made for use in an infringement of these claims and are not staple articles of commerce suitable for substantial noninfringing use. On information and belief, as discussed in the prior paragraph, Ericsson had knowledge or acted with willful blindness that the infringing products or articles therein were specially made or adapted for use in an infringement of the ’031 Patent and not a staple article of commerce suitable for substantial noninfringing use.

50. For at least the reasons detailed in the prior paragraphs, Ericsson's infringement of the '031 Patent has been willful. Ericsson's continued infringement of the '031 Patent has damaged and will continue to damage Samsung.

Counterclaim No. II:

Infringement of U.S. Patent No. 7,342,444

51. Samsung repeats and realleges the allegations in paragraphs 1–44 as though fully set forth herein.

52. United States Patent No. 7,342,444 (“the '444 Patent”), entitled “Power Amplifying Apparatus Using Asymmetric Power Drive,” issued on March 11, 2008.

53. On information and belief, the products containing a Doherty amplifier infringe one or more claims of the '444 Patent. On information and belief, Ericsson directly infringes the '444 Patent by making, using, selling, offering for sale within the United States and/or importing into the United States, products that contain a Doherty amplifier. Exemplary infringing products include the RBS 6000 series base stations.

54. Additionally, on information and belief, service providers who deploy and/or make routine use of the infringing products in their LTE networks infringe one or more claims of the '444 Patent. On information and belief, Ericsson is aware of the '444 Patent at least through the filing of this Counterclaim. Further, on information and belief, Ericsson knowingly induces users of products to infringe the '444 Patent.

55. On information and belief, Ericsson contributes to infringement of one or more claims of the '444 Patent because Ericsson knows that infringing products containing a Doherty amplifier are specially made for use in an infringement of these claims and are not staple articles of commerce suitable for substantial noninfringing use. On information and belief, as discussed in the prior paragraph, Ericsson had knowledge or acted with willful blindness that the infringing

products or articles therein were specially made or adapted for use in an infringement of the '444 Patent and not a staple article of commerce suitable for substantial noninfringing use.

56. For at least the reasons detailed in the prior paragraphs, Ericsson's infringement of the '444 Patent has been willful. Ericsson's continued infringement of the '444 Patent has damaged and will continue to damage Samsung.

Counterclaim No. III:

Infringement of U.S. Patent No. 8,059,681

57. Samsung repeats and realleges the allegations in paragraphs 1–44 as though fully set forth herein.

58. United States Patent No. 8,059,681 (“the '681 Patent”), entitled “Method And Apparatus For Transmitting/Receiving Packet In Mobile Communication System,” issued on November 15, 2011. Samsung is the owner of all rights, title, and interest in and to the '681 Patent and is entitled to sue for past and future infringement.

59. On information and belief, the products that implement the LTE wireless communications standards, including 3GPP TS 36.321, entitled “Evolved Universal Terrestrial Radio Access (E-UTRA); Medium Access Control (MAC) protocol specification,” infringe one or more claims of the '681 Patent. On information and belief, Ericsson directly infringes the '681 Patent by making, using, selling, offering for sale within the United States and/or importing into the United States, products, components of products, and/or methods covered by one or more claims of the '681 Patent, including those for use with LTE applications that implement the LTE wireless communications standards, including 3GPP TS 36.321. Exemplary infringing products include the RBS 6000 series base stations.

60. Additionally, on information and belief, service providers who deploy and/or make routine use of the infringing products in their LTE networks directly infringe the '681

Patent. On information and belief, Ericsson actively induces others, including LTE network service providers who deploy and/or make routine use of the infringing products in their LTE networks, to commit direct infringement of one or more claims of the '681 Patent. On information and belief, Ericsson is aware of the '681 Patent or has acted with willful blindness to its existence at least through the parties' longstanding licensing negotiations, Samsung's ETSI disclosures, the specific applicability of Samsung's LTE patents to the LTE standard—a standard that Ericsson adopted knowing that its products would be covered by third party patents, including Samsung's patents, and/or the filing of this Counterclaim. Further, on information and belief, Ericsson induces service providers who deploy the infringing products in their LTE networks, by providing at least manuals, training, guides, and/or demonstrations, to perform acts intended by Ericsson to cause direct infringement of one or more claims of the '681 Patent.

61. On information and belief, Ericsson contributes to infringement of one or more claims of the '681 Patent by others, including LTE network service providers who deploy the infringing products in their LTE networks, by providing infringing products that implement, for example, the LTE wireless communications standards, including 3GPP TS 36.321, which are specially made or adapted for use in an infringement of the '681 Patent and are not staple articles of commerce suitable for substantial noninfringing use. On information and belief, as discussed in the prior paragraph, Ericsson had knowledge or acted with willful blindness that the products or articles therein were specially made or adapted for use in an infringement of the '681 Patent and not a staple article of commerce capable for substantial noninfringing use.

62. For at least the reasons detailed in the prior paragraphs, Ericsson's infringement of the '681 Patent has been willful. Ericsson's continued infringement of the '681 Patent has damaged and will continue to damage Samsung.

Counterclaim No. IV:

Infringement of U.S. Patent No. 8,315,195

63. Samsung repeats and realleges the allegations in paragraphs 1–44 as though fully set forth herein.

64. United States Patent No. 8,315,195 (“the ’195 Patent”), entitled “Method And Apparatus For Transmitting And Receiving Control Channels By Restricting A Set Of The Control Channels In A Wireless Communication System,” issued on November 20, 2012. Samsung is the owner of all rights, title, and interest in and to the ’195 Patent and is entitled to sue for past and future infringement.

65. On information and belief, the products, components of products, and/or methods that implement the LTE wireless communications standards, including 3GPP TS 36.213, entitled “Evolved Universal Terrestrial Radio Access (E-UTRA); Physical layer procedures” infringe one or more claims of the ’195 Patent. On information and belief, Ericsson directly infringes the ’195 Patent by making, using, selling, offering for sale within the United States and/or importing into the United States, infringing products that implement the LTE wireless communications standards, including 3GPP TS 36.213. Exemplary infringing products include the RBS 6000 series base stations.

66. Additionally, on information and belief, service providers who deploy and/or make routine use of the infringing products in their LTE networks directly infringe one or more claims of the ’195 Patent. On information and belief, Ericsson actively induces others, including LTE network service providers who deploy and/or make routine use of the infringing products in their LTE networks, to commit direct infringement of one or more claims of the ’195 Patent. On information and belief, Ericsson is aware of the ’195 Patent or has acted with willful blindness to its existence at least through the parties’ longstanding licensing negotiations, Samsung’s ETSI

disclosures, the specific applicability of Samsung's LTE patents to the LTE standard—a standard that Ericsson adopted knowing that its products would be covered by third party patents, including Samsung's patents, and/or the filing of this Counterclaim. Further, on information and belief, Ericsson induces service providers who deploy the infringing products in their LTE networks, by providing at least manuals, training, guides, and/or demonstrations, to perform acts intended by Ericsson to cause direct infringement of one or more claims of the '195 Patent.

67. On information and belief, Ericsson contributes to infringement of one or more claims of the '195 Patent by others, including LTE network service providers who deploy the infringing products in their LTE networks, by providing the products or articles therein, which are specially made or adapted for use in an infringement of the '195 Patent and are not staple articles of commerce suitable for substantial noninfringing use. On information and belief, as discussed in the prior paragraph, Ericsson had knowledge or acted with willful blindness that the infringing products or articles therein were specially made or adapted for use in an infringement of the '195 Patent and not a staple article of commerce suitable for substantial noninfringing use.

68. For at least the reasons detailed in the prior paragraphs, Ericsson's infringement of the '195 Patent has been willful. Ericsson's continued infringement of the '195 Patent has damaged and will continue to damage Samsung.

Counterclaim No. V:

Infringement of U.S. Patent No. 8,331,328

69. Samsung repeats and realleges the allegations in paragraphs 1–44 as though fully set forth herein.

70. United States Patent No. 8,331,328 (“the '328 Patent”), entitled “Control And Data Signaling In SC-FDMA Communication Systems,” issued on December 11, 2012.

Samsung is the owner of all rights, title, and interest in and to the '328 Patent and is entitled to sue for past and future infringement.

71. On information and belief, the products, components of products, and/or methods that implement the LTE wireless communications standards, including 3GPP TS 36.212, entitled “Evolved Universal Terrestrial Radio Access (E-UTRA); Multiplexing and channel coding,” infringe one or more claims of the '328 Patent. On information and belief, Ericsson directly infringes the '328 Patent by making, using, selling, offering for sale within the United States and/or importing into the United States, infringing products that implement the LTE wireless communications standards, including 3GPP TS 36.212. Exemplary infringing products include the RBS 6000 series base stations.

72. Additionally, on information and belief, service providers who deploy and/or make routine use of the infringing products in their LTE networks directly infringe one or more claims of the '328 Patent. On information and belief, Ericsson actively induces others, including LTE network service providers who deploy and/or make routine use of the infringing products in their LTE networks, to commit direct infringement of one or more claims of the '328 Patent. On information and belief, Ericsson is aware of the '328 Patent or has acted with willful blindness to its existence at least through the parties' longstanding licensing negotiations, Samsung's ETSI disclosures, the specific applicability of Samsung's LTE patents to the LTE standard—a standard that Ericsson adopted knowing that its products would be covered by third party patents, including Samsung's patents, and/or the filing of this Counterclaim. Further, on information and belief, Ericsson induces service providers who deploy the infringing products in their LTE networks, by providing at least manuals, training, guides, and/or demonstrations, to perform acts intended by Ericsson to cause direct infringement of one or more claims of the '328 Patent.

73. On information and belief, Ericsson contributes to infringement of one or more claims of the '328 Patent by others, including LTE network service providers who deploy the infringing products in their LTE networks, by providing the products or articles therein, which are specially made or adapted for use in an infringement of the '328 Patent and are not staple articles of commerce suitable for substantial noninfringing use. On information and belief, as discussed in the prior paragraph, Ericsson had knowledge or acted with willful blindness that the products or articles therein were specially made or adapted for use in an infringement of the '328 Patent and not a staple article of commerce capable for substantial noninfringing use.

74. For at least the reasons detailed in the prior paragraphs, Ericsson's infringement of the '328 Patent has been willful. Ericsson's continued infringement of the '328 Patent has damaged and will continue to damage Samsung.

Counterclaim No. VI:

Infringement of U.S. Reissue Patent No. 44,105

75. Samsung repeats and realleges the allegations in paragraphs 1–44 as though fully set forth herein.

76. United States Reissue Patent No. 44,105 (“the '105 Patent”), entitled “Apparatus And Method For FT Pre-Coding Of Data To Reduce PAPR In A Multi-Carrier Wireless Network,” issued on March 26, 2013. Samsung is the owner of all rights, title, and interest in and to the '105 Patent and is entitled to sue for past and future infringement.

77. On information and belief, the products, components of products, and/or methods that implement the LTE wireless communications standards, including 3GPP TS 36.201, entitled “Evolved Universal Terrestrial Radio Access (E-UTRA); LTE physical layer; General description,” and 3GPP TS 36.211, entitled “Evolved Universal Terrestrial Radio Access (E-UTRA); Physical channels and modulation,” infringe one or more claims of the '105 Patent. On

information and belief, Ericsson directly infringes the '105 Patent by making, using, selling, offering for sale within the United States and/or importing into the United States, infringing products that implement the LTE wireless communications standards, including 3GPP TS 36.201 and 36.211. Exemplary infringing products include the RBS 6000 series base stations.

78. Additionally, on information and belief, service providers who deploy and/or make routine use of the infringing products in their LTE networks directly infringe one or more claims of the '105 Patent. On information and belief, Ericsson actively induces others, including LTE network service providers who deploy the infringing products in their LTE networks, to commit direct infringement of one or more claims of the '105 Patent. On information and belief, Ericsson is aware of the '105 Patent or has acted with willful blindness to its existence at least through the parties' longstanding licensing negotiations, Samsung's ETSI disclosures, the specific applicability of Samsung's LTE patents to the LTE standard—a standard that Ericsson adopted knowing that its products would be covered by third party patents, including Samsung's patents, and/or the filing of this Counterclaim. Further, on information and belief, Ericsson induces service providers who deploy the infringing products in their LTE networks, by providing at least manuals, training, guides, and/or demonstrations, to perform acts intended by Ericsson to cause direct infringement of one or more claims of the '105 Patent.

79. On information and belief, Ericsson contributes to the infringement of one or more claims of the '105 Patent by others, including LTE network service providers who deploy the infringing products in their LTE networks, by providing the products or articles therein, which are specially made or adapted for use in an infringement of the '105 Patent and are not staple articles of commerce suitable for substantial noninfringing use. On information and belief, as discussed in the prior paragraph, Ericsson had knowledge or acted with willful

blindness that the infringing products or articles therein were specially made or adapted for use in an infringement of the '105 Patent and not a staple article of commerce suitable for substantial noninfringing use.

80. For at least the reasons detailed in the prior paragraphs, Ericsson's infringement of the '105 Patent has been willful. Ericsson's continued infringement of the '105 Patent has damaged and will continue to damage Samsung.

Counterclaim No. VII:

Infringement of U.S. Patent No. 6,941,338

81. Samsung re-alleges and fully incorporates paragraphs 1–44 above of the Counterclaims as though fully set forth herein.

82. United States Patent No. 6,941,338 (“the '338 Patent”), entitled “Distributed Cache for a Wireless Communication System,” issued on September 6, 2005. Samsung is the owner of all rights, title, and interest in and to the '338 Patent and is entitled to sue for past and future infringement.

83. On information and belief, Ericsson directly infringes one or more claims of the '338 Patent by making, using, selling, offering for sale within the United States and/or importing into the United States, wireless communication systems that include, for example, RBS series wireless base stations and/or other nodes or solutions near the network's edge that cache network data. Exemplary infringing systems include products and solutions, for example, in Ericsson's SSR 8000 product family, RBS 6000 product families, Mobile Cloud Accelerator and/or Transparent Internet Caching offerings.

84. Additionally, on information and belief, service providers who deploy and/or make routine use of the infringing products in their wireless communication networks infringe

one or more claims of the '338 Patent. On information and belief, Ericsson is aware of the '338 Patent at least through Samsung's allegations in this and/or related litigations. Further, on information and belief, Ericsson knowingly induces users of products to infringe the '338 Patent.

85. On information and belief, Ericsson contributes to infringement of one or more claims of the '338 Patent because Ericsson knows that infringing systems including products and solutions, for example, in Ericsson's SSR 8000 and RBS product families and Ericsson's Mobile Cloud Accelerator and Transparent Internet Caching offerings are specially made for use in an infringement of these claims and are not staple articles of commerce suitable for substantial noninfringing use. On information and belief, as discussed in the prior paragraph, Ericsson had knowledge or acted with willful blindness that the infringing products or articles therein were specially made or adapted for use in an infringement of the '338 Patent and not a staple article of commerce suitable for substantial noninfringing use.

86. For at least the reasons detailed in the prior paragraphs, Ericsson's infringement of the '338 Patent has been willful. Ericsson's continued infringement of the '338 Patent has damaged and will continue to damage Samsung.

Counterclaim No. VIII:

Infringement of U.S. Patent No. 6,907,048

87. Samsung re-alleges and fully incorporates paragraphs 1–44 above of the Counterclaims as though fully set forth herein.

88. United States Patent No. 6,907,048 ("the '048 Patent"), entitled "Method and Apparatus for Transporting Ethernet Data Packets via Radio Frames in a Wireless Metropolitan Area Network," issued on June 14, 2005. Samsung is the owner of all rights, title, and interest in and to the '048 Patent and is entitled to sue for past and future infringement.

89. On information and belief, Ericsson directly infringes one or more claims of the '048 Patent by making, using, selling, offering for sale within the United States and/or importing into the United States, backhaul products that, for example, map Ethernet frames over SDH. Exemplary infringing products include the MINI-LINK TN R4 family.

90. Additionally, on information and belief, service providers who deploy and/or make routine use of the infringing products in their wireless communications networks infringe one or more claims of the '048 Patent. On information and belief, Ericsson is aware of the '048 Patent at least through Samsung's allegations in this and/or related litigations. Further, on information and belief, Ericsson knowingly induces users of products to infringe the '048 Patent.

91. On information and belief, Ericsson contributes to infringement of one or more claims of the '048 Patent because Ericsson knows that infringing products that map Ethernet frames over SDH are specially made for use in an infringement of these claims and are not staple articles of commerce suitable for substantial noninfringing use. On information and belief, as discussed in the prior paragraph, Ericsson had knowledge or acted with willful blindness that the infringing products or articles therein were specially made or adapted for use in an infringement of the '048 Patent and not a staple article of commerce suitable for substantial noninfringing use.

92. For at least the reasons detailed in the prior paragraphs, Ericsson's infringement of the '048 Patent has been willful. Ericsson's continued infringement of the '048 Patent has damaged and will continue to damage Samsung.

Counterclaim No. IX:

Infringement of U.S. Patent No. 6,164,129

93. Samsung re-alleges and fully incorporates paragraphs 1–44 above of the Counterclaims as though fully set forth herein.

94. United States Patent No. 6,164,129 (“the ’129 Patent”), entitled “Apparatus and Methods for Monitoring System Environment of Outdoor Base Station,” issued on December 26, 2000. Samsung is the owner of all rights, title, and interest in and to the ’129 Patent and is entitled to sue for past and future infringement.

95. On information and belief, Ericsson directly infringes one or more claims of the ’129 Patent by making, using, selling, offering for sale within the United States and/or importing into the United States, wireless base station products that contain an environmental monitor. Exemplary infringing products include the RBS 6000 family of products.

96. Additionally, on information and belief, service providers who deploy and/or make routine use of the infringing products in their wireless communications networks infringe one or more claims of the ’129 Patent. On information and belief, Ericsson is aware of the ’129 Patent at least through Samsung’s allegations in this and/or related litigations. Further, on information and belief, Ericsson knowingly induces users of products to infringe the ’129 Patent.

97. On information and belief, Ericsson contributes to infringement of one or more claims of the ’129 Patent because Ericsson knows that infringing products containing an environmental monitor are specially made for use in an infringement of these claims and are not staple articles of commerce suitable for substantial noninfringing use. On information and belief, as discussed in the prior paragraph, Ericsson had knowledge or acted with willful blindness that the infringing products or articles therein were specially made or adapted for use in an infringement of the ’129 Patent and not a staple article of commerce suitable for substantial noninfringing use.

98. For at least the reasons detailed in the prior paragraphs, Ericsson's infringement of the '129 Patent has been willful. Ericsson's continued infringement of the '129 Patent has damaged and will continue to damage Samsung.

Counterclaim No. X:

Infringement of U.S. Patent No. 5,742,595

99. Samsung re-alleges and fully incorporates paragraphs 1–44 above of the Counterclaims as though fully set forth herein.

100. United States Patent No. 5,742,595 (“the '595 Patent”), entitled “Processing CDMA Signals,” issued on April 21, 1998. Samsung is the owner of all rights, title, and interest in and to the '595 Patent and is entitled to sue for past and future infringement.

101. On information and belief, Ericsson directly infringes one or more claims of the '595 Patent by making, using, selling, offering for sale within the United States and/or importing into the United States, products that process CDMA and/or WCDMA signals. Exemplary infringing products include the RBS 6000 family of products.

102. Additionally, on information and belief, service providers who deploy and/or make routine use of the infringing products in their CDMA and/or WCDMA wireless communications networks infringe one or more claims of the '595 Patent. On information and belief, Ericsson is aware of the '595 Patent at least through Samsung's allegations in this and/or related litigations. Further, on information and belief, Ericsson knowingly induces users of products to infringe the '595 Patent.

103. On information and belief, Ericsson contributes to infringement of one or more claims of the '595 Patent because Ericsson knows that infringing products processing CDMA

and/or WCDMA signals are specially made for use in an infringement of these claims and are not staple articles of commerce suitable for substantial noninfringing use. On information and belief, as discussed in the prior paragraph, Ericsson had knowledge or acted with willful blindness that the infringing products or articles therein were specially made or adapted for use in an infringement of the '595 Patent and not a staple article of commerce suitable for substantial noninfringing use.

104. For at least the reasons detailed in the prior paragraphs, Ericsson's infringement of the '595 Patent has been willful. Ericsson's continued infringement of the '595 Patent has damaged and will continue to damage Samsung.

Counterclaim No. XI:

Infringement of U.S. Patent No. 6,366,570

105. Samsung re-alleges and fully incorporates paragraphs 1–44 above of the Counterclaims as though fully set forth herein.

106. United States Patent No. 6,366,570 (“the '570 Patent”), entitled “Processing CDMA Signals,” issued on April 2, 2002. Samsung is the owner of all rights, title, and interest in and to the '570 Patent and is entitled to sue for past and future infringement.

107. On information and belief, Ericsson directly infringes one or more claims of the '570 Patent by making, using, selling, offering for sale within the United States and/or importing into the United States, products that process CDMA and/or WCDMA signals. Exemplary infringing products include the RBS 6000 family of products.

108. Additionally, on information and belief, service providers who deploy and/or make routine use of the infringing products in their CDMA and/or WCDMA wireless communications networks infringe one or more claims of the '570 Patent. On information and

belief, Ericsson is aware of the '570 Patent at least through Samsung's allegations in this and/or related litigations. Further, on information and belief, Ericsson knowingly induces users of products to infringe the '570 Patent.

109. On information and belief, Ericsson contributes to infringement of one or more claims of the '570 Patent because Ericsson knows that infringing products processing CDMA and/or WCDMA signals are specially made for use in an infringement of these claims and are not staple articles of commerce suitable for substantial noninfringing use. On information and belief, as discussed in the prior paragraph, Ericsson had knowledge or acted with willful blindness that the infringing products or articles therein were specially made or adapted for use in an infringement of the '570 Patent and not a staple article of commerce suitable for substantial noninfringing use.

110. For at least the reasons detailed in the prior paragraphs, Ericsson's infringement of the '570 Patent has been willful. Ericsson's continued infringement of the '570 Patent has damaged and will continue to damage Samsung.

Counterclaim No. XII:

Infringement of U.S. Patent No. 6,999,471

111. Samsung re-alleges and fully incorporates paragraphs 1–44 above of the Counterclaims as though fully set forth herein.

112. United States Patent No. 6,999,471 ("the '471 Patent"), entitled "Communication Structure for Multiplexed Links," issued on February 14, 2006. Samsung is the owner of all rights, title, and interest in and to the '471 Patent and is entitled to sue for past and future infringement.

113. On information and belief, Ericsson directly infringes one or more claims of the '471 Patent by making, using, selling, offering for sale within the United States and/or importing into the United States products such as, for example, WCDMA wireless base stations. Exemplary infringing products are the RBS 6000 family of products.

114. Additionally, on information and belief, service providers who deploy and/or make routine use of the infringing products in their wireless communications networks infringe one or more claims of the '471 Patent. On information and belief, Ericsson is aware of the '471 Patent at least through Samsung's allegations in this and/or related litigations. Further, on information and belief, Ericsson knowingly induces users of products to infringe the '471 Patent.

115. On information and belief, Ericsson contributes to infringement of one or more claims of the '471 Patent because Ericsson knows that infringing products are specially made for use in an infringement of these claims and are not staple articles of commerce suitable for substantial noninfringing use. On information and belief, as discussed in the prior paragraph, Ericsson had knowledge or acted with willful blindness that the infringing products or articles therein were specially made or adapted for use in an infringement of the '471 Patent and not a staple article of commerce suitable for substantial noninfringing use.

116. For at least the reasons detailed in the prior paragraphs, Ericsson's infringement of the '471 Patent has been willful. Ericsson's continued infringement of the '471 Patent has damaged and will continue to damage Samsung.

Counterclaim No. XIII:

Infringement of U.S. Patent No. 7,379,478

117. Samsung re-alleges and fully incorporates paragraphs 1–44 above of the Counterclaims as though fully set forth herein.

118. United States Patent No. 7,379,478 (“the ’478 Patent”), entitled “System and Method for Allocating Power,” issued on May 27, 2008. Samsung is the owner of all rights, title, and interest in and to the ’478 Patent and is entitled to sue for past and future infringement.

119. On information and belief, Ericsson directly infringes one or more claims of the ’478 Patent by making, using, selling, offering for sale within the United States and/or importing into the United States products such as, for example, WCDMA wireless base stations. Exemplary infringing products are the RBS 6000 family of products.

120. Additionally, on information and belief, service providers who deploy and/or make routine use of the infringing products in their wireless communications networks infringe one or more claims of the ’478 Patent. On information and belief, Ericsson is aware of the ’478 Patent at least through Samsung’s allegations in this and/or related litigations. Further, on information and belief, Ericsson knowingly induces users of products to infringe the ’478 Patent.

121. On information and belief, Ericsson contributes to infringement of one or more claims of the ’478 Patent because Ericsson knows that infringing products are specially made for use in an infringement of these claims and are not staple articles of commerce suitable for substantial noninfringing use. On information and belief, as discussed in the prior paragraph, Ericsson had knowledge or acted with willful blindness that the infringing products or articles therein were specially made or adapted for use in an infringement of the ’478 Patent and not a staple article of commerce suitable for substantial noninfringing use.

122. For at least the reasons detailed in the prior paragraphs, Ericsson’s infringement of the ’478 Patent has been willful. Ericsson’s continued infringement of the ’478 Patent has damaged and will continue to damage Samsung.

Counterclaim No. XIV:

Infringement of U.S. Patent No. 6,411,825

123. Samsung re-alleges and fully incorporates paragraphs 1–44 above of the Counterclaims as though fully set forth herein.

124. United States Patent No. 6,411,825 (“the ’825 Patent”), entitled “Distributed Architecture for a Base Station Transceiver Subsystem,” issued on June 25, 2002. Samsung is the owner of all rights, title, and interest in and to the ’825 Patent and is entitled to sue for past and future infringement.

125. On information and belief, Ericsson directly infringes one or more claims of the ’825 Patent by making, using, selling, offering for sale within the United States and/or importing into the United States, products such as, for example, the RBS series wireless base stations. Exemplary infringing products include the RBS 6000 family of products.

126. Additionally, on information and belief, service providers who deploy and/or make routine use of the infringing products in their wireless communications networks infringe one or more claims of the ’825 Patent. On information and belief, Ericsson is aware of the ’825 Patent at least through Samsung’s allegations in this and/or related litigations. Further, on information and belief, Ericsson knowingly induces users of products to infringe the ’825 Patent.

127. On information and belief, Ericsson contributes to infringement of one or more claims of the ’825 Patent because Ericsson knows that infringing products such as the RBS 6000 series wireless base stations are specially made for use in an infringement of these claims and are not staple articles of commerce suitable for substantial noninfringing use. On information and belief, as discussed in the prior paragraph, Ericsson had knowledge or acted with willful blindness that the infringing products or articles therein were specially made or adapted for use

in an infringement of the '825 Patent and not a staple article of commerce suitable for substantial noninfringing use.

128. For at least the reasons detailed in the prior paragraphs, Ericsson's infringement of the '825 Patent has been willful. Ericsson's continued infringement of the '825 Patent has damaged and will continue to damage Samsung.

Counterclaim No. XV:

Infringement of U.S. Patent No. 6,801,788

129. Samsung re-alleges and fully incorporates paragraphs 1–44 above of the Counterclaims as though fully set forth herein.

130. United States Patent No. 6,801,788 (“the '788 Patent”), entitled “Distributed Architecture for a Base Station Transceiver Subsystem Having a Radio Unit that is Remotely Programmable,” issued on October 4, 2004. Samsung is the owner of all rights, title, and interest in and to the '788 Patent and is entitled to sue for past and future infringement.

131. On information and belief, Ericsson directly infringes one or more claims of the '788 Patent by making, using, selling, offering for sale within the United States and/or importing into the United States, products such as, for example, the RBS series wireless base stations. Exemplary infringing products include the RBS 6000 family of products.

132. Additionally, on information and belief, service providers who deploy and/or make routine use of the infringing products in their wireless communications networks infringe one or more claims of the '788 Patent. On information and belief, Ericsson is aware of the '788 Patent at least through Samsung's allegations in this and/or related litigations. Further, on information and belief, Ericsson knowingly induces users of products to infringe the '788 Patent.

133. On information and belief, Ericsson contributes to infringement of one or more claims of the '788 Patent because Ericsson knows that infringing products such as the RBS 6000 series wireless base stations are specially made for use in an infringement of these claims and are not staple articles of commerce suitable for substantial noninfringing use. On information and belief, as discussed in the prior paragraph, Ericsson had knowledge or acted with willful blindness that the infringing products or articles therein were specially made or adapted for use in an infringement of the '788 Patent and not a staple article of commerce suitable for substantial noninfringing use.

134. For at least the reasons detailed in the prior paragraphs, Ericsson's infringement of the '788 Patent has been willful. Ericsson's continued infringement of the '788 Patent has damaged and will continue to damage Samsung.

Counterclaim No. XVI:

Infringement of U.S. Patent No. 8,193,047

135. Samsung repeats and realleges the allegations in paragraphs 1–44 as though fully set forth herein.

136. United States Patent No. 8,193,047 ("the '047 Patent"), entitled "Semiconductor Device Having Sufficient Process Margin And Method Of Forming Same," issued on June 5, 2012. Samsung is the owner of all rights, title, and interest in and to the '047 Patent and is entitled to sue for past and future infringement.

137. On information and belief, the products containing a semiconductor device with 6T SRAM cells infringe one or more claims of the '047 Patent. On information and belief, Ericsson directly infringes the '047 Patent by making, using, selling, offering for sale within the United States and/or importing into the United States, products that contain a semiconductor

device with 6T SRAM cells. Exemplary infringing products include the RBS 6000 series base stations.

138. Additionally, on information and belief, service providers who deploy and/or make routine use of the infringing products infringe one or more claims of the '047 Patent. On information and belief, Ericsson is aware of the '047 Patent at least through Samsung's allegations in this and/or related litigations. Further, on information and belief, Ericsson knowingly induces users of products to infringe the '047 Patent.

139. On information and belief, Ericsson contributes to infringement of one or more claims of the '047 Patent because Ericsson knows that infringing products containing a semiconductor device with 6T SRAM cells are specially made for use in an infringement of these claims and are not staple articles of commerce suitable for substantial noninfringing use. On information and belief, as discussed in the prior paragraph, Ericsson had knowledge or acted with willful blindness that the infringing products or articles therein were specially made or adapted for use in an infringement of the '047 Patent and not a staple article of commerce suitable for substantial noninfringing use.

140. For at least the reasons detailed in the prior paragraphs, Ericsson's infringement of the '047 Patent has been willful. Ericsson's continued infringement of the '047 Patent has damaged and will continue to damage Samsung.

Counterclaim No. XVII:

Infringement of U.S. Patent No. 8,351,380

141. Samsung repeats and realleges the allegations in paragraphs 1–44 as though fully set forth herein.

142. United States Patent No. 8,351,380 ("the '380 Patent"), entitled "Method And Apparatus For Layer 2 ARQ For Packets," issued on January 8, 2013. Samsung is the owner of

all rights, title, and interest in and to the '380 Patent and is entitled to sue for past and future infringement.

143. On information and belief, the products, components of products, and/or methods that implement the LTE wireless communications standards, including 3GPP TS 36.322, entitled “Evolved Universal Terrestrial Radio Access (E-UTRA); Radio Link Control (RLC) protocol specification” infringe one or more claims of the '380 Patent. On information and belief, Ericsson directly infringes the '380 Patent by making, using, selling, offering for sale within the United States and/or importing into the United States, infringing products that implement the LTE wireless communications standards, including 3GPP TS 36.322. Exemplary infringing products include the RBS 6000 series base stations.

144. Additionally, on information and belief, service providers who deploy and/or make routine use of the infringing products in their LTE networks directly infringe one or more claims of the '380 Patent. On information and belief, Ericsson actively induces others, including LTE network service providers who deploy and/or make routine use of the infringing products in their LTE networks, to commit direct infringement of one or more claims of the '380 Patent. On information and belief, Ericsson is aware of the '380 Patent or has acted with willful blindness to its existence at least through the parties' longstanding licensing negotiations, Samsung's ETSI disclosures, the specific applicability of Samsung's LTE patents to the LTE standard—a standard that Ericsson adopted knowing that its products would be covered by third party patents, including Samsung's patents, and/or through Samsung's allegations in this and/or related litigations. Further, on information and belief, Ericsson induces service providers who deploy the infringing products in their LTE networks, by providing at least manuals, training, guides,

and/or demonstrations, to perform acts intended by Ericsson to cause direct infringement of one or more claims of the '380 Patent.

145. On information and belief, Ericsson contributes to infringement of one or more claims of the '380 Patent by others, including LTE network service providers who deploy the infringing products in their LTE networks, by providing the products or articles therein, which are specially made or adapted for use in an infringement of the '380 Patent and are not staple articles of commerce suitable for substantial noninfringing use. On information and belief, as discussed in the prior paragraph, Ericsson had knowledge or acted with willful blindness that the infringing products or articles therein were specially made or adapted for use in an infringement of the '380 Patent and not a staple article of commerce suitable for substantial noninfringing use.

146. For at least the reasons detailed in the prior paragraphs, Ericsson's infringement of the '380 Patent has been willful. Ericsson's continued infringement of the '380 Patent has damaged and will continue to damage Samsung.

Counterclaim No. XVIII:

Infringement of U.S. Patent No. 8,498,255

147. Samsung repeats and realleges the allegations in paragraphs 1–44 as though fully set forth herein.

148. United States Patent No. 8,498,255 ("the '255 Patent"), entitled "Method For Updating Location Information Of User Equipment," issued on July 30, 2013. Samsung is the owner of all rights, title, and interest in and to the '255 Patent and is entitled to sue for past and future infringement.

149. As part of the prosecution leading to the '255 Patent, on May 1, 2013, the Examiner issued a Notice of Allowance for application claims 1–3, 5–6, 8, 10–11, and 14–35. Applicants paid the issue fee and on June 5, 2013, the USPTO issued an Issue Notification for

the as-allowed claims. On the same date, Applicants filed a Petition to Withdraw from Issue, Request for Continued Examination, Supplemental Information Disclosure, and related documents.

150. As part of the Request for Continued Examination, Applicants filed amended and new claims. Specifically, Applicant amended application claims 1, 2, 11, 14, 15, 20–22, 28–30, and 35 and added new claims 36–39. After review of the amendment and consideration of prior art, the Examiner issued a new Notice of Allowance and related documents on June 21, 2013.

151. The as-issued claims of the '255 Patent did not reflect the amendments made during the continuing examination, but rather the claims in the May 1, 2013 Notice of Allowance. The omission of the amendments was the fault of the USPTO, entitling Samsung to seek a certificate of correction, which issued on October 22, 2013. However, because the infringement complained of herein commenced upon issuance of the '255 Patent, this Count is based on the as-issued claims before October 22, 2013 and on the corrected claims on and after October 22, 2013.

152. On information and belief, the products, components of products, and/or methods that implement the LTE wireless communications standards, including 3GPP TS 23.401, entitled “General Packet Radio Service (GPRS) enhancements for Evolved Universal Terrestrial Radio Access Network (E-UTRAN) access”; 3GPP TS 36.300, entitled “Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Overall description; Stage 2”; 3GPP TS 36.331, entitled “Evolved Universal Terrestrial Radio Access (E-UTRA); Radio Resource Control (RRC); Protocol specification”; and 3GPP TS 36.413, entitled “Evolved Universal Terrestrial Radio Access Network (E-UTRAN); S1 Application Protocol (S1AP)”, infringe one or more claims of the '255 Patent, both as issued and

as corrected. On information and belief, Ericsson directly infringes the '255 Patent by making, using, selling, offering for sale within the United States, and/or importing into the United States infringing products that implement the LTE wireless communications standards, including 3GPP TS 23.401, 3GPP TS 36.300, 3GPP TS 36.331, and 3GPP TS 36.413. Exemplary infringing products include the RBS 6000 series base stations and SGSN-MME products.

153. Additionally, on information and belief, service providers who deploy and/or make routine use of the infringing products in their LTE networks directly infringe one or more claims of the '255 Patent, both as issued and as corrected. On information and belief, Ericsson actively induces others, including LTE network service providers who deploy and/or make routine use of the infringing products in their LTE networks, to commit direct infringement of one or more claims of the '255 Patent. On information and belief, Ericsson is aware of the '255 Patent or has acted with willful blindness to its existence at least through Samsung's ETSI disclosures, the specific applicability of Samsung's LTE patents to the LTE standard—a standard that Ericsson adopted knowing that its products would be covered by third-party patents, including Samsung's patents, and/or the filing of this Counterclaim. Further, on information and belief, Ericsson induces service providers who deploy the infringing products in their LTE networks, by providing at least manuals, training, guides, and/or demonstrations, to perform acts intended by Ericsson to cause direct infringement of one or more claims of the '255 Patent.

154. On information and belief, Ericsson contributes to the infringement of one or more claims of the '255 Patent, both as issued and as corrected, by others, including LTE network service providers who deploy the infringing products in their LTE networks, by providing the products or articles therein, which are specially made or adapted for use in an infringement of the '255 Patent and are not staple articles of commerce suitable for substantial

noninfringing use. On information and belief, as discussed in the prior paragraph, Ericsson had knowledge or acted with willful blindness that the infringing products or articles therein were specially made or adapted for use in an infringement of the '255 Patent and not a staple article of commerce suitable for substantial noninfringing use.

155. For at least the reasons detailed in the prior paragraphs, Ericsson's infringement of the '255 Patent, both as issued and as corrected, has been willful. Ericsson's continued infringement of the '255 Patent has damaged and will continue to damage Samsung.

Counterclaim No. XIX:

Infringement of U.S. Patent No. 8,520,499

156. Samsung repeats and realleges the allegations in paragraphs 1–44 as though fully set forth herein.

157. United States Patent No. 8,520,499 ("the '499 Patent"), entitled "Method, Apparatus, and System For Transmitting And Receiving Information Of An Uncoded Channel In An Orthogonal Frequency Division Multiplexing System," issued on August 27, 2013. Samsung is the owner of all rights, title, and interest in and to the '499 Patent and is entitled to sue for past and future infringement.

158. On information and belief, the products, components of products, and/or methods that implement the LTE wireless communications standards, including 3GPP TS 36.201, entitled "Evolved Universal Terrestrial Radio Access (E-UTRA); LTE physical layer; General description," and 3GPP TS 36.211, entitled "Evolved Universal Terrestrial Radio Access (E-UTRA); Physical channels and modulation," and 3GPP TS 36.212 entitled, "3rd Generation Partnership Project: Technical Specification Group Radio Access Network; Evolved Universal Terrestrial Radio Access (E-UTRA); Multiplexing and Channel Coding (Release 8)" infringe one or more claims of the '499 Patent. On information and belief, Ericsson directly infringes the

'499 Patent by making, using, selling, offering for sale within the United States and/or importing into the United States, infringing products that implement the LTE wireless communications standards, including 3GPP TS 36.211, 3GPP TS 36.212, and 3GPP TS 36.212. Exemplary infringing products include the RBS 6000 series base stations.

159. Additionally, on information and belief, service providers who deploy and/or make routine use of the infringing products in their LTE networks directly infringe one or more claims of the '499 Patent. On information and belief, Ericsson actively induces others, including LTE network service providers who deploy and/or make routine use of the infringing products in their LTE networks, to commit direct infringement of one or more claims of the '499 Patent. On information and belief, Ericsson is aware of the '499 Patent or has acted with willful blindness to its existence at least through the parties' longstanding licensing negotiations, Samsung's ETSI disclosures, the specific applicability of Samsung's LTE patents to the LTE standard—a standard that Ericsson adopted knowing that its products would be covered by third party patents, including Samsung's patents, and/or through Samsung's allegations in this and/or related litigations. Further, on information and belief, Ericsson induces service providers who deploy the infringing products in their LTE networks, by providing at least manuals, training, guides, and/or demonstrations, to perform acts intended by Ericsson to cause direct infringement of one or more claims of the '499 Patent.

160. On information and belief, Ericsson contributes to infringement of one or more claims of the '499 Patent by others, including LTE network service providers who deploy the infringing products in their LTE networks, by providing the products or articles therein, which are specially made or adapted for use in an infringement of the '499 Patent and are not staple articles of commerce suitable for substantial noninfringing use. On information and belief, as

discussed in the prior paragraph, Ericsson had knowledge or acted with willful blindness that the infringing products or articles therein were specially made or adapted for use in an infringement of the '499 Patent and not a staple article of commerce suitable for substantial noninfringing use.

161. For at least the reasons detailed in the prior paragraphs, Ericsson's infringement of the '499 Patent has been willful. Ericsson's continued infringement of the '499 Patent has damaged and will continue to damage Samsung.

Counterclaim No. XX:

Infringement of U.S. Patent No. 8,520,656

162. Samsung repeats and realleges the allegations in paragraphs 1–44 as though fully set forth herein.

163. United States Patent No. 8,520,656 ("the '656 Patent"), entitled "Method And Apparatus For Transmitting And Receiving Control Channels By Restricting A Set Of The Control Channels In A Wireless Communication System," issued on November 20, 2012. Samsung is the owner of all rights, title, and interest in and to the '656 Patent and is entitled to sue for past and future infringement.

164. On information and belief, the products, components of products, and/or methods that implement the LTE wireless communications standards, including 3GPP TS 36.211, entitled "Evolved Universal Terrestrial Radio Access (E-UTRA); Physical channels and modulation," 3GPP TS 36.213, entitled "Evolved Universal Terrestrial Radio Access (E-UTRA); Physical layer procedures," and 36.331, entitled "Evolved Universal Terrestrial Radio Access (E-UTRA); Radio Resource Control (RRC); Protocol specification," infringe one or more claims of the '656 Patent. On information and belief, Ericsson directly infringes the '656 Patent by making, using, selling, offering for sale within the United States and/or importing into the United States, infringing products that implement the LTE wireless communications standards, including 3GPP

TS 36.211, 3GPP TS 36.213, and 3GPP TS 36.331. Exemplary infringing products include the RBS 6000 series base stations.

165. Additionally, on information and belief, service providers who deploy and/or make routine use of the infringing products in their LTE networks directly infringe one or more claims of the '656 Patent. On information and belief, Ericsson actively induces others, including LTE network service providers who deploy and/or make routine use of the infringing products in their LTE networks, to commit direct infringement of one or more claims of the '656 Patent. On information and belief, Ericsson is aware of the '656 Patent or has acted with willful blindness to its existence at least through the parties' longstanding licensing negotiations, Samsung's ETSI disclosures, the specific applicability of Samsung's LTE patents to the LTE standard—a standard that Ericsson adopted knowing that its products would be covered by third party patents, including Samsung's patents, and/or through Samsung's allegations in this and/or related litigations. Further, on information and belief, Ericsson induces service providers who deploy the infringing products in their LTE networks, by providing at least manuals, training, guides, and/or demonstrations, to perform acts intended by Ericsson to cause direct infringement of one or more claims of the '656 Patent.

166. On information and belief, Ericsson contributes to infringement of one or more claims of the '656 Patent by others, including LTE network service providers who deploy the infringing products in their LTE networks, by providing the products or articles therein, which are specially made or adapted for use in an infringement of the '656 Patent and are not staple articles of commerce suitable for substantial noninfringing use. On information and belief, as discussed in the prior paragraph, Ericsson had knowledge or acted with willful blindness that the

infringing products or articles therein were specially made or adapted for use in an infringement of the '656 Patent and not a staple article of commerce suitable for substantial noninfringing use.

167. For at least the reasons detailed in the prior paragraphs, Ericsson's infringement of the '656 Patent has been willful. Ericsson's continued infringement of the '656 Patent has damaged and will continue to damage Samsung.

Counterclaim No. XXI:

Declaratory Judgment of Non-Infringement & Invalidity of U.S. Patent No. 6,029,052

168. Samsung re-alleges and fully incorporates paragraphs 1–44 above of the Counterclaims as though fully set forth herein.

169. By the filing of its Complaint, Ericsson has purported to assert a claim against Samsung for the alleged infringement of United States Patent No. 6,029,052 ("the '052 Patent"). Samsung has not infringed, contributed to the infringement of, or induced the infringement of any valid claim of the '052 Patent. Consequently, an actual controversy exists between the parties with respect to the infringement, validity and scope of the '052 Patent.

170. Samsung has not and is not now infringing, directly or indirectly, or contributed to infringement by another, or actively induced others to infringe any valid or enforceable claim of the '052 Patent. Samsung is not liable for any infringement, literal or under the doctrine of equivalents, of the '052 Patent.

171. Samsung does not willfully infringe and has not willfully infringed, either directly, jointly, indirectly, contributorily, or by inducement, any valid and enforceable claim of the '052 Patent, either literally or under the doctrine of equivalents.

172. As a result, Samsung is entitled to a judgment finding that the '052 Patent is not infringed by Samsung, either literally or under the doctrine of equivalents, and that Samsung has not contributed to or induced any infringement by another.

173. In addition, each and every claim of the '052 Patent is invalid for failure to comply with the conditions and requirements of patentability set forth in the patent statutes, including 35 U.S.C. §§ 101, 102, 103, and/or 112. Samsung is therefore entitled to declaratory judgment that each and every claim of the '052 Patent is invalid.

Counterclaim No. XXII:

Declaratory Judgment of Non-Infringement & Invalidity of U.S. Patent No. 6,058,359

174. Samsung re-alleges and fully incorporates paragraphs 1–44 above of the Counterclaims as though fully set forth herein.

175. By the filing of its Complaint, Ericsson has purported to assert a claim against Samsung for the alleged infringement of United States Patent No. 6,058,359 (“the '359 Patent”). Samsung has not infringed, contributed to the infringement of, or induced the infringement of any valid claim of the '359 Patent. Consequently, an actual controversy exists between the parties with respect to the infringement, validity and scope of the '359 Patent.

176. Samsung has not and is not now infringing, directly or indirectly, or contributed to infringement by another, or actively induced others to infringe any valid or enforceable claim of the '359 Patent. Samsung is not liable for any infringement, literal or under the doctrine of equivalents, of the '359 Patent.

177. Samsung does not willfully infringe and has not willfully infringed, either directly, jointly, indirectly, contributorily, or by inducement, any valid and enforceable claim of the '359 Patent, either literally or under the doctrine of equivalents.

178. As a result, Samsung is entitled to a judgment finding that the '359 Patent is not infringed by Samsung, either literally or under the doctrine of equivalents, and that Samsung has not contributed to or induced any infringement by another.

179. In addition, each and every claim of the '359 Patent is invalid for failure to comply with the conditions and requirements of patentability set forth in the patent statutes, including 35 U.S.C. §§ 101, 102, 103, and/or 112. Samsung is therefore entitled to declaratory judgment that each and every claim of the '359 Patent is invalid.

Counterclaim No. XXIII:

Declaratory Judgment of Non-Infringement & Invalidity of U.S. Patent No. 6,278,888

180. Samsung re-alleges and fully incorporates paragraphs 1–44 above of the Counterclaims as though fully set forth herein.

181. By the filing of its Complaint, Ericsson has purported to assert a claim against Samsung for the alleged infringement of United States Patent No. 6,278,888 (“the '888 Patent”). Samsung has not infringed, contributed to the infringement of, or induced the infringement of any valid claim of the '888 Patent. Consequently, an actual controversy exists between the parties with respect to the infringement, validity and scope of the '888 Patent.

182. Samsung has not and is not now infringing, directly or indirectly, or contributed to infringement by another, or actively induced others to infringe any valid or enforceable claim of the '888 Patent. Samsung is not liable for any infringement, literal or under the doctrine of equivalents, of the '888 Patent.

183. Samsung does not willfully infringe and has not willfully infringed, either directly, jointly, indirectly, contributorily, or by inducement, any valid and enforceable claim of the '888 Patent, either literally or under the doctrine of equivalents.

184. As a result, Samsung is entitled to a judgment finding that the '888 Patent is not infringed by Samsung, either literally or under the doctrine of equivalents, and that Samsung has not contributed to or induced any infringement by another.

185. In addition, each and every claim of the '888 Patent is invalid for failure to comply with the conditions and requirements of patentability set forth in the patent statutes, including 35 U.S.C. §§ 101, 102, 103, and/or 112. Samsung is therefore entitled to declaratory judgment that each and every claim of the '888 Patent is invalid.

Counterclaim No. XXIV:

Declaratory Judgment of Non-Infringement & Invalidity of U.S. Patent No. 6,301,556

186. Samsung re-alleges and fully incorporates paragraphs 1–44 above of the Counterclaims as though fully set forth herein.

187. By the filing of its Complaint, Ericsson has purported to assert a claim against Samsung for the alleged infringement of United States Patent No. 6,301,556 (“the '556 Patent”). Samsung has not infringed, contributed to the infringement of, or induced the infringement of any valid claim of the '556 Patent. Consequently, an actual controversy exists between the parties with respect to the infringement, validity and scope of the '556 Patent.

188. Samsung has not and is not now infringing, directly or indirectly, or contributed to infringement by another, or actively induced others to infringe any valid or enforceable claim of the '556 Patent. Samsung is not liable for any infringement, literal or under the doctrine of equivalents, of the '556 Patent.

189. Samsung does not willfully infringe and has not willfully infringed, either directly, jointly, indirectly, contributorily, or by inducement, any valid and enforceable claim of the '556 Patent, either literally or under the doctrine of equivalents.

190. As a result, Samsung is entitled to a judgment finding that the '556 Patent is not infringed by Samsung, either literally or under the doctrine of equivalents, and that Samsung has not contributed to or induced any infringement by another.

191. In addition, each and every claim of the '556 Patent is invalid for failure to comply with the conditions and requirements of patentability set forth in the patent statutes, including 35 U.S.C. §§ 101, 102, 103, and/or 112. Samsung is therefore entitled to declaratory judgment that each and every claim of the '556 Patent is invalid.

Counterclaim No. XXV:

Declaratory Judgment of Non-Infringement & Invalidity of U.S. Patent No. 6,418,310

192. Samsung re-alleges and fully incorporates paragraphs 1–44 above of the Counterclaims as though fully set forth herein.

193. By the filing of its Complaint, Ericsson has purported to assert a claim against Samsung for the alleged infringement of United States Patent No. 6,418,310 (“the '310 Patent”). Samsung has not infringed, contributed to the infringement of, or induced the infringement of any valid claim of the '310 Patent. Consequently, an actual controversy exists between the parties with respect to the infringement, validity and scope of the '310 Patent.

194. Samsung has not and is not now infringing, directly or indirectly, or contributed to infringement by another, or actively induced others to infringe any valid or enforceable claim of the '310 Patent. Samsung is not liable for any infringement, literal or under the doctrine of equivalents, of the '310 Patent.

195. Samsung does not willfully infringe and has not willfully infringed, either directly, jointly, indirectly, contributorily, or by inducement, any valid and enforceable claim of the '310 Patent, either literally or under the doctrine of equivalents.

196. As a result, Samsung is entitled to a judgment finding that the '310 Patent is not infringed by Samsung, either literally or under the doctrine of equivalents, and that Samsung has not contributed to or induced any infringement by another.

197. In addition, each and every claim of the '310 Patent is invalid for failure to comply with the conditions and requirements of patentability set forth in the patent statutes, including 35 U.S.C. §§ 101, 102, 103, and/or 112. Samsung is therefore entitled to declaratory judgment that each and every claim of the '310 Patent is invalid.

Counterclaim No. XXVI:

Declaratory Judgment of Non-Infringement & Invalidity of U.S. Patent No. 6,519,223

198. Samsung re-alleges and fully incorporates paragraphs 1–44 above of the Counterclaims as though fully set forth herein.

199. By the filing of its Complaint, Ericsson has purported to assert a claim against Samsung for the alleged infringement of United States Patent No. 6,519,223 (“the '223 Patent”). Samsung has not infringed, contributed to the infringement of, or induced the infringement of any valid claim of the '223 Patent. Consequently, an actual controversy exists between the parties with respect to the infringement, validity and scope of the '223 Patent.

200. Samsung has not and is not now infringing, directly or indirectly, or contributed to infringement by another, or actively induced others to infringe any valid or enforceable claim of the '223 Patent. Samsung is not liable for any infringement, literal or under the doctrine of equivalents, of the '223 Patent.

201. Samsung does not willfully infringe and has not willfully infringed, either directly, jointly, indirectly, contributorily, or by inducement, any valid and enforceable claim of the '223 Patent, either literally or under the doctrine of equivalents.

202. As a result, Samsung is entitled to a judgment finding that the '223 Patent is not infringed by Samsung, either literally or under the doctrine of equivalents, and that Samsung has not contributed to or induced any infringement by another.

203. In addition, each and every claim of the '223 Patent is invalid for failure to comply with the conditions and requirements of patentability set forth in the patent statutes, including 35 U.S.C. §§ 101, 102, 103, and/or 112. Samsung is therefore entitled to declaratory judgment that each and every claim of the '223 Patent is invalid.

Counterclaim No. XXVII:

Declaratory Judgment of Non-Infringement & Invalidity of U.S. Patent No. 6,624,832

204. Samsung re-alleges and fully incorporates paragraphs 1–44 above of the Counterclaims as though fully set forth herein.

205. By the filing of its Complaint, Ericsson has purported to assert a claim against Samsung for the alleged infringement of United States Patent No. 6,624,832 (“the '832 Patent”). Samsung has not infringed, contributed to the infringement of, or induced the infringement of any valid claim of the '832 Patent. Consequently, an actual controversy exists between the parties with respect to the infringement, validity and scope of the '832 Patent.

206. Samsung has not and is not now infringing, directly or indirectly, or contributed to infringement by another, or actively induced others to infringe any valid or enforceable claim of the '832 Patent. Samsung is not liable for any infringement, literal or under the doctrine of equivalents, of the '832 Patent.

207. Samsung does not willfully infringe and has not willfully infringed, either directly, jointly, indirectly, contributorily, or by inducement, any valid and enforceable claim of the '832 Patent, either literally or under the doctrine of equivalents.

208. As a result, Samsung is entitled to a judgment finding that the '832 Patent is not infringed by Samsung, either literally or under the doctrine of equivalents, and that Samsung has not contributed to or induced any infringement by another.

209. In addition, each and every claim of the '832 Patent is invalid for failure to comply with the conditions and requirements of patentability set forth in the patent statutes, including 35 U.S.C. §§ 101, 102, 103, and/or 112. Samsung is therefore entitled to declaratory judgment that each and every claim of the '832 Patent is invalid.

Counterclaim No. XXVIII:

Declaratory Judgment of Non-Infringement & Invalidity of U.S. Patent No. 6,772,215

210. Samsung re-alleges and fully incorporates paragraphs 1–44 above of the Counterclaims as though fully set forth herein.

211. By the filing of its Complaint, Ericsson has purported to assert a claim against Samsung for the alleged infringement of United States Patent No. 6,772,215 (“the '215 Patent”). Samsung has not infringed, contributed to the infringement of, or induced the infringement of any valid claim of the '215 Patent. Consequently, an actual controversy exists between the parties with respect to the infringement, validity and scope of the '215 Patent.

212. Samsung has not and is not now infringing, directly or indirectly, or contributed to infringement by another, or actively induced others to infringe any valid or enforceable claim of the '215 Patent. Samsung is not liable for any infringement, literal or under the doctrine of equivalents, of the '215 Patent.

213. Samsung does not willfully infringe and has not willfully infringed, either directly, jointly, indirectly, contributorily, or by inducement, any valid and enforceable claim of the '215 Patent, either literally or under the doctrine of equivalents.

214. As a result, Samsung is entitled to a judgment finding that the '215 Patent is not infringed by Samsung, either literally or under the doctrine of equivalents, and that Samsung has not contributed to or induced any infringement by another.

215. In addition, each and every claim of the '215 Patent is invalid for failure to comply with the conditions and requirements of patentability set forth in the patent statutes, including 35 U.S.C. §§ 101, 102, 103, and/or 112. Samsung is therefore entitled to declaratory judgment that each and every claim of the '215 Patent is invalid.

Counterclaim No. XXIX:

Declaratory Judgment of Non-Infringement & Invalidity of U.S. Patent No. 6,445,917

216. Samsung re-alleges and fully incorporates paragraphs 1–44 above of the Counterclaims as though fully set forth herein.

217. By the filing of its Complaint, Ericsson has purported to assert a claim against Samsung for the alleged infringement of United States Patent No. 6,445,917 (“the '917 Patent”). Samsung has not infringed, contributed to the infringement of, or induced the infringement of any valid claim of the '917 Patent. Consequently, an actual controversy exists between the parties with respect to the infringement, validity and scope of the '917 Patent.

218. Samsung has not and is not now infringing, directly or indirectly, or contributed to infringement by another, or actively induced others to infringe any valid or enforceable claim of the '917 Patent. Samsung is not liable for any infringement, literal or under the doctrine of equivalents, of the '917 Patent.

219. Samsung does not willfully infringe and has not willfully infringed, either directly, jointly, indirectly, contributorily, or by inducement, any valid and enforceable claim of the '917 Patent, either literally or under the doctrine of equivalents.

220. As a result, Samsung is entitled to a judgment finding that the '917 Patent is not infringed by Samsung, either literally or under the doctrine of equivalents, and that Samsung has not contributed to or induced any infringement by another.

221. In addition, each and every claim of the '917 Patent is invalid for failure to comply with the conditions and requirements of patentability set forth in the patent statutes, including 35 U.S.C. §§ 101, 102, 103, and/or 112. Samsung is therefore entitled to declaratory judgment that each and every claim of the '917 Patent is invalid.

Counterclaim No. XXX:

Declaratory Judgment of Non-Infringement & Invalidity of U.S. Patent No. 6,473,506

222. Samsung re-alleges and fully incorporates paragraphs 1–44 above of the Counterclaims as though fully set forth herein.

223. By the filing of its Complaint, Ericsson has purported to assert a claim against Samsung for the alleged infringement of United States Patent No. 6,473,506 (“the '506 Patent”). Samsung has not infringed, contributed to the infringement of, or induced the infringement of any valid claim of the '506 Patent. Consequently, an actual controversy exists between the parties with respect to the infringement, validity and scope of the '506 Patent.

224. Samsung has not and is not now infringing, directly or indirectly, or contributed to infringement by another, or actively induced others to infringe any valid or enforceable claim of the '506 Patent. Samsung is not liable for any infringement, literal or under the doctrine of equivalents, of the '506 Patent.

225. Samsung does not willfully infringe and has not willfully infringed, either directly, jointly, indirectly, contributorily, or by inducement, any valid and enforceable claim of the '506 Patent, either literally or under the doctrine of equivalents.

226. As a result, Samsung is entitled to a judgment finding that the '506 Patent is not infringed by Samsung, either literally or under the doctrine of equivalents, and that Samsung has not contributed to or induced any infringement by another.

227. In addition, each and every claim of the '506 Patent is invalid for failure to comply with the conditions and requirements of patentability set forth in the patent statutes, including 35 U.S.C. §§ 101, 102, 103, and/or 112. Samsung is therefore entitled to declaratory judgment that each and every claim of the '506 Patent is invalid.

Counterclaim No. XXXI:

Declaratory Judgment of Non-Infringement & Invalidity of U.S. Patent No. 8,169,992

228. Samsung re-alleges and fully incorporates paragraphs 1–44 above of the Counterclaims as though fully set forth herein.

229. By the filing of its Complaint, Ericsson has purported to assert a claim against Samsung for the alleged infringement of United States Patent No. 8,169,992 (“the '992 Patent”). Samsung has not infringed, contributed to the infringement of, or induced the infringement of any valid claim of the '992 Patent. Consequently, an actual controversy exists between the parties with respect to the infringement, validity and scope of the '992 Patent.

230. Samsung has not and is not now infringing, directly or indirectly, or contributed to infringement by another, or actively induced others to infringe any valid or enforceable claim of the '992 Patent. Samsung is not liable for any infringement, literal or under the doctrine of equivalents, of the '992 Patent.

231. Samsung does not willfully infringe and has not willfully infringed, either directly, jointly, indirectly, contributorily, or by inducement, any valid and enforceable claim of the '992 Patent, either literally or under the doctrine of equivalents.

232. As a result, Samsung is entitled to a judgment finding that the '992 Patent is not infringed by Samsung, either literally or under the doctrine of equivalents, and that Samsung has not contributed to or induced any infringement by another.

In addition, each and every claim of the '992 Patent is invalid for failure to comply with the conditions and requirements of patentability set forth in the patent statutes, including 35 U.S.C. §§ 101, 102, 103, and/or 112. Samsung is therefore entitled to declaratory judgment that each and every claim of the '992 Patent is invalid.

Counterclaim No. XXXII:

Breach of Contract

233. Samsung incorporates by reference the allegations set forth in paragraphs 1–44 above as though fully set forth herein.

234. As set forth above, by committing to license the patents that Ericsson has declared as essential to adopters of the Standards on FRAND terms, Ericsson entered into contractual commitments with ETSI and the IEEE. Parties implementing the Standards, including Samsung, are intended third party beneficiaries of the contractual commitments made by Ericsson and are entitled to enforce benefits of those contractual commitments.

235. As a result of its breaches, Ericsson has injured Samsung, including its business or property. Samsung has also been forced to expend resources resolving this licensing dispute and has suffered or faces the threat of, in particular, increased costs, loss of profits, loss of customers and potential customers, loss of goodwill and product image, uncertainty in business planning, uncertainty among customs and potential customers, and injunction or exclusion order.

236. For at least the reasons detailed in the prior paragraphs, Samsung is entitled to an order compelling specific performance of Ericsson's FRAND obligations. For avoidance of doubt, Samsung is not seeking any monetary damages on account of Ericsson's breach of its FRAND obligations.

Counterclaim No. XXXIII:

Promissory Estoppel

237. Samsung incorporates by reference the allegations set forth in paragraphs 1–44 above as though fully set forth herein.

238. Ericsson made clear and definite promises to potential licensees through its commitments to the IEEE that Ericsson would license the patents it has declared as essential to the WiFi standard on FRAND terms.

239. It was foreseeable to Ericsson that Samsung would rely on Ericsson’s promise to license on FRAND terms. The intended purpose of Ericsson’s promises was to induce reliance. Ericsson knew or should have reasonably expected that those promises would induce others to implement the WiFi standard.

240. Samsung developed and marketed its products and services in reliance on Ericsson’s promises, as described above, including making its products and services compliant with the WiFi standard.

241. Thus, Ericsson is estopped from breaking its promise to license the patents it has declared as essential to Samsung on FRAND terms by the doctrine of promissory estoppel.

242. Samsung has been harmed as a result of its foreseeable and reasonable reliance on Ericsson’s promises. Samsung has been forced to expend resources resolving this licensing dispute, and is threatened by the loss of profits, loss of customers and potential customers, loss of goodwill and product image, uncertainty in business planning, and uncertainty among customers and potential customers.

Counterclaim No. XXXIV:

Declaratory Judgment that Samsung is Licensed to Practice Ericsson's Patents

243. Samsung re-alleges and fully incorporates paragraphs 1–44 above of the Counterclaims as though fully set forth herein.

244. On information and belief and by way of example without limitation, Samsung has rights arising from its use of Qualcomm Incorporated (“Qualcomm”) components in certain Samsung products. On information and belief, Qualcomm entered into a license agreement with Ericsson by which Qualcomm received, among other things, certain rights related to the Ericsson Asserted Patents and other Ericsson patents (collectively “the Qualcomm Licensed Patents”). Samsung has an express or implied license to manufacture, use, import, and sell electronic devices incorporating licensed Qualcomm components under the Qualcomm Licensed Patents

245. On information and belief, and by way of example without limitation, Samsung also has rights arising from its use of ST-Ericsson components in certain Samsung products. On information and belief, ST-Ericsson has obtained from Ericsson rights to one or more of the Ericsson Asserted Patents and other Ericsson patents (collectively “the ST Ericsson Licensed Patents”). Samsung has an express or implied license to manufacture, use, import, and sell electronic devices incorporating licensed ST-Ericsson components under the ST Ericsson Licensed Patents.

246. Notwithstanding these licenses, Ericsson has alleged infringement and sought license compensation for products that are licensed under the Qualcomm and ST Ericsson licenses. Samsung has been forced to expend resources resolving this licensing dispute, and is threatened by the loss of profits, loss of customers and potential customers, loss of goodwill and product image, uncertainty in business planning, and uncertainty among customers and potential customers.

247. Samsung is entitled to a judgment finding that it is licensed to manufacture, use, import, and sell electronic devices incorporating licensed Qualcomm components, ST Ericsson components, and/or components of other Ericsson licensed third parties and owes no royalties to Ericson on account of such manufacture, use, import, or sale.

EXCEPTIONAL CASE

248. This case is an exceptional case entitling Samsung to an award of its reasonable attorneys' fees incurred in connection with this action pursuant to 35 U.S.C. § 285, as a result of, *inter alia*, Ericsson's assertion of the Ericsson Asserted Patents against Samsung with the knowledge that the Ericsson Asserted Patents are invalid and unenforceable.

PRAYER FOR RELIEF

WHEREFORE, Samsung prays for judgment against Ericsson as follows:

- a. For dismissal of Ericsson's Complaint in its entirety with prejudice;
- b. For a judgment that Ericsson has infringed directly, contributorily, and/or by inducement the asserted claims of each Samsung Asserted Patent;
- c. For a judgment declaring that each and every claim of the Samsung Asserted Patents are valid and enforceable;
- d. For judgment and a declaration that Ericsson has breached its legal obligations with respect to granting Samsung FRAND terms and conditions of licenses to any of its essential patents;
- e. For an order compelling specific performance of Ericsson's FRAND obligations;
- f. For a judgment declaring that Samsung has not and does not infringe, under any theory, any asserted claim of an Ericsson Asserted Patent;
- g. For a judgment declaring that Samsung is licensed to manufacture, use, import, and sell electronic devices incorporating licensed Qualcomm components, ST Ericsson components,

and/or components of other Ericsson licensed third parties and owes no royalties to Ericsson on account of such manufacture, use, import, or sale;

- h. For a judgment declaring that each and every asserted claim of the Ericsson Asserted Patents is invalid and unenforceable;
- i. For an award of reasonable attorneys' fees and expenses against Ericsson pursuant to 35 U.S.C. § 285 or otherwise;
- j. For damages together with prejudgment interest;
- k. For Samsung's costs of suit against Ericsson;
- l. For a permanent injunction against Ericsson products found to infringe any Samsung patent for which Samsung is entitled to obtain an injunction; and
- m. For such other and further relief as this Court may deem just and proper.

JURY DEMAND

Samsung hereby demands a trial by jury on all issues triable by a jury alleged or relating to this litigation pursuant to Rule 38 of the Federal Rules of Civil Procedure.

Dated: November 5, 2013

Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of the above and foregoing document has been served on November 5, 2013 to all counsel of record pursuant to the Court's CM/ECF system.

/s/Indranil Mukerji
Indranil Mukerji